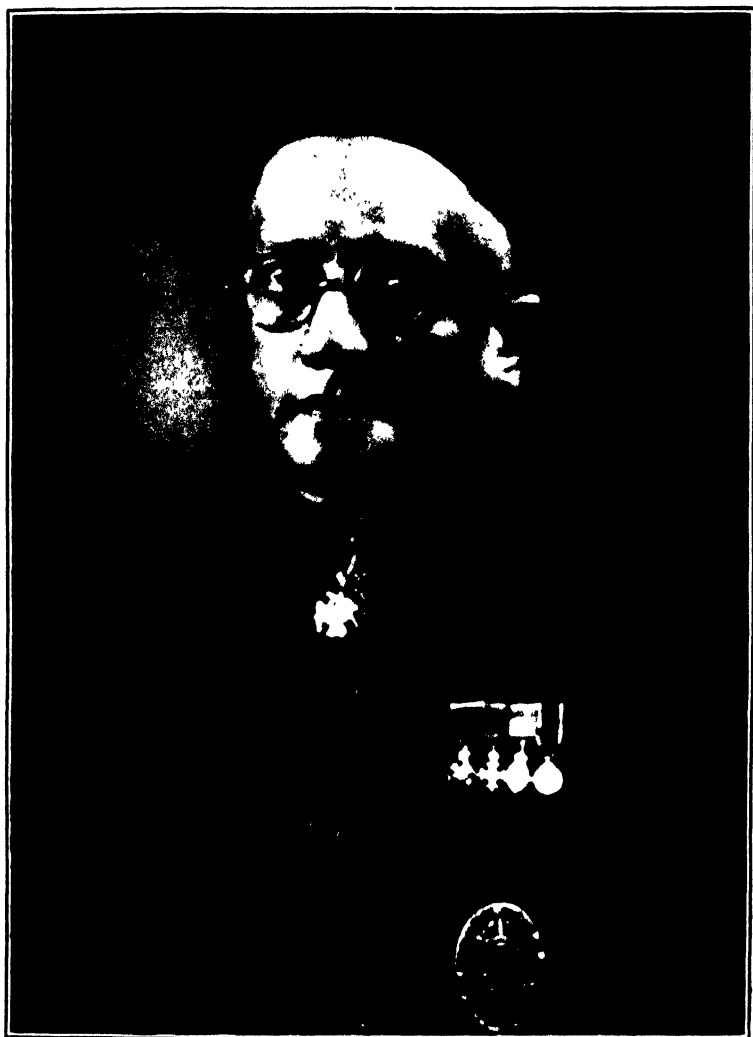
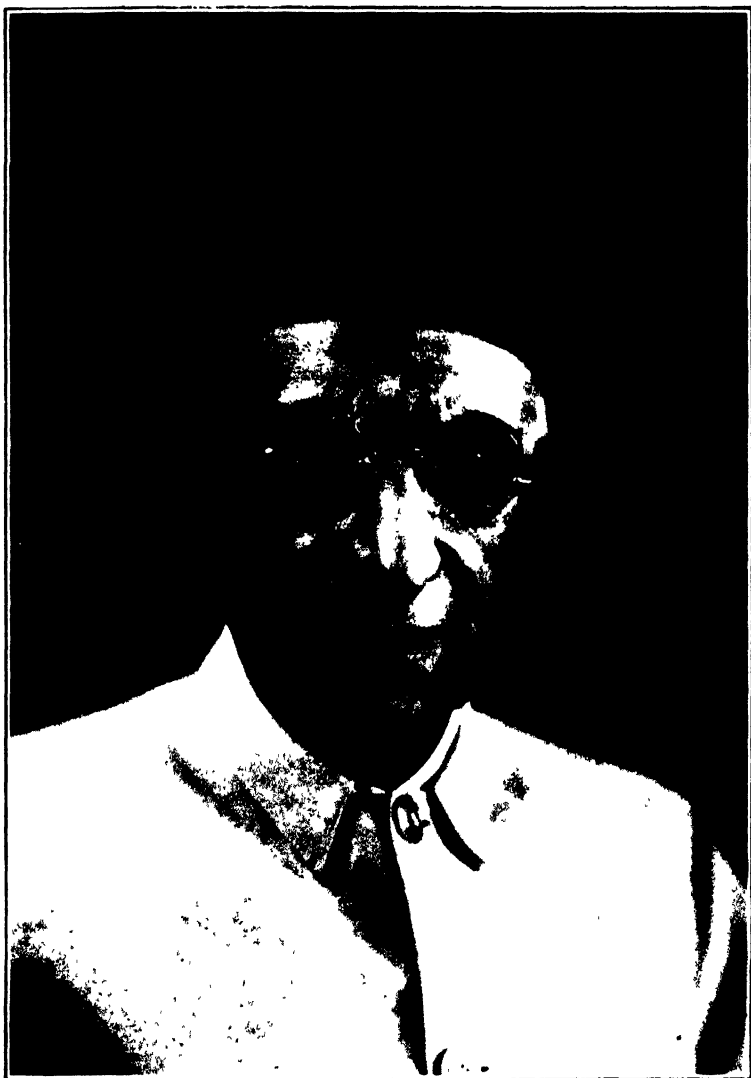


THE HISTORY OF
THE BOMBAY ELECTRIC SUPPLY AND
TRAMWAYS COMPANY, LIMITED.
1905-1935.



Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E.,
Chairman of the B. E. S. & T. Co., Ltd., since 1926.



Mr. Pestonji D. Mahaluxmivala, J.P., *Secretary.*

Foreword.

I am often asked what are the greatest changes which have taken place since I landed in Bombay in July, 1897. Undoubtedly the most beneficial is the advent of electricity. We have been witnesses in our generation of vast developments in the City. There is the diffusion of the population arising from the fine new streets cut through an overcrowded Island by the Improvement Trust. There is the immeasurable improvement in the standard of office accommodation following the flight from ramshackle buildings in Apollo Street, Churchgate Street and Medows Street after the outbreak of plague. There is the equally beneficial raising of the standard of residential premises, especially through the growth of the flat habit. There is the transformation of transport consequent on the motor car. But taking all in all, nothing has increased so materially the amenities of life in the City and Island, and raised the standard of health more, than the general use of electricity.

Indeed it is almost impossible for those softened by the ease of life to-day to realise what it was before this servant was harnessed to the well-being of the citizens. Although the oil lamp had been improved, it was far from the efficient article it is to-day. Lamps stank and gave off an intense heat ; their care in a moderate-sized bungalow was the main work of a whole-time hamal. I can well recall dining in Grant Road one steamy night in May with that prominent citizen, Dr. Blaney, with a three hundred candle power lamp over my head and no punkah. Swish-swish punkahs had their merits ; the punkah cooly, poor fellow, few. But they were dark, dirty, noisome things, and in May and June Bombay was indeed the City of Dreadful Night. How lucky we felt ourselves if the punkah functioned for even one unbroken night, and the slumbers of the punkah cooly, who often eked out a miserable wage by work throughout the day, drove many a man and woman to the verge of homicidal fury. One

resolute lady of my acquaintance locked up her punkah coolies during the day so that they might come fresh to their duty in the evening.

Yet electricity was slow in coming. My native city of Bristol had been electrified for years before I turned my wandering footsteps East. It was a bit of a shock to come to The Second City in the Empire and find horse trams, good of their kind, but then ten years out of date. Progress was hung up by the franchise of the original Bombay Tramway Company, and then the protracted litigation following its acquisition by the Municipal Corporation and leased to the founders of the present Company. Even then progress was extraordinarily slow, and I had to wait until 1913 before I could persuade the Company to extend its overhead mains to serve my bungalow in Dongarsi Road: and it was first proposed to charge me a connection fee of thirteen hundred rupees. The "maximum demand" system was not popular, and it was not until a flat rate was substituted that an effective advance was made. The proposal to utilise the rainfall of the Ghats for the generation of electricity in bulk hung fire for many years, as capitalists were shy of so great an enterprise. But when movement started, it was rapid. Bombay is now the most completely electrified city in Asia. Quite apart from the abundant supply of "White Power" for industry, it is not generally realised that through the very low rates it charges to small consumers—I might even say unprofitable rates—the B. E. S. T. has carried the benefits of electricity down to a humbler class of citizen than any other corporation in like circumstances. There are many thousand of users of electricity whose monthly bills are under two rupees, and statistics show that a much higher proportion of the population is connected with the supply system, as compared with any other city in India. Last, but by no means least, we have the electric refrigerator.

Opinions will differ as to whether the motor car is a boon or the reverse. It means a striking economy in time and convenience, but whether it has led to anything more than a frenzied rush from place to place, to the neglect of our cultural sense, is another matter. In one direction its benefits are unchallengeable. The motor omnibus is of immense advantage to the middle classes, and gives them better and cheaper transport than they previously enjoyed. From small begin-

nings it has developed into an immense service. Thanks to wise direction from the Traffic Authorities, Bombay has a completely co-ordinated system of transport between the railways, the trams and the buses, and a service which is the admiration and envy of other cities.

The story of the development of B. E. S. T., through many and arduous vicissitudes to the great corporation it is to-day, is told in these pages. None is better qualified to present it than Mr. Pestonji D. Mahaluxmivala, who has grown up with it from the earliest days, and who this year celebrated the Golden Jubilee of his association with the original Tramways Company and its successor.

STANLEY REED.

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HORSE TRAM CAR.

INAUGURATION OF THE TRAMWAY SERVICE IN BOMBAY.

9th May 1874.

Prior to 1874 public conveyance facilities in Bombay were few. They were chiefly confined to two-wheeled bullock "rekas", most inconvenient and uncomfortable to travel in, accommodating four passengers.

Fares per passenger were—

Mumbadevi	..	Bazaar Gate	..	$\frac{3}{4}$	anna.
„	..	Elphinstone Circle	..	1	„
Market	..	Bazaar Gate	..	$\frac{1}{2}$	„
„	..	Elphinstone Circle	..	$\frac{3}{4}$	„
„	..	Grant's Buildings	..	1	„

Besides these there were some horse-drawn four-wheeled sigrams accommodating 5 passengers, 4 inside and 1 outside.

There were also some double-deck horse-drawn omnibuses plying between Mumbadevi and Elphinstone Circle *via* Kalbadevi and between Girgaum (Portuguese Church) and the Cathedral (Fort).

The fares per passenger were 2 annas for the lower and 1 anna for the upper deck.

There were some buggys and palanquins also plying for hire.

Such were the transport facilities in Bombay when in January, 1865, Messrs. Stearns Hobart & Company, an American trading firm carrying on import and export business, applied to Government for a concession to lay and operate a Tramway System in Bombay.

In reply they were informed they should apply to the Municipality, and on their doing so they secured the concession under the Deed of Agreement dated the 28th February, 1865.

The principal clauses of the Deed were :—

The said Grantees or their Assigns shall have power from time to time to fix the rates of fares for carrying persons and goods in the cars or carriages to be run on the said Railway, provided that the rates of fares on at least one-half of the cars or carriages available for passengers which daily run on the said tracks shall for any distance not over three miles not exceed three annas and for any greater distance in the same proportion.

The provisions of this Agreement shall remain and be in force for a term of twenty-five years from the date thereof but the said Grantees or their Assigns shall, if so desirous, be entitled to a renewal thereof for a further term of twenty-five years upon the same or such other terms as shall be agreed upon between the said Grantees or their Assigns and the said Commissioners.

But on the termination of the American Civil War, owing to a great financial crash in Bombay, the scheme did not fructify.

Subsequently, in October 1870 Messrs. Stearns Hobart & Co. wrote to the Municipal Commissioner of their intention to put into force the Agreement entered into on 28th February, 1865.

In reply the Commissioner wrote on the 19th January, 1871 :—

Referring to your communication on the subject of the proposed Bombay Horse Railway Co., Ltd., I have the honour to inform you that on the 16th November last I referred the whole question for Counsel's opinion and on the 22nd December was advised that the Agreement entered into by the late Board of Commissioners was *ultra vires* and not binding on the Corporation under Section 4 of Bombay Act 2 of 1865.

It is right that a similar application has been made by Messrs. Lawrence & Co. of Bombay under date 13th December which application I must also submit to the Bench without loss of time.

Thereafter, on the 25th January, 1871, the matter was referred to a Select Committee of the Justices of the Peace for the City of Bombay incorporated under Act II of 1865, of the Council of the Governor of Bombay for making Laws and Regulations with a request to report on the following points :—

1st.—Whether it is desirable to introduce Street Tramways into Bombay ?

2nd.—If so, on what thoroughfares they should be laid down and on what gauge ?

3rd.—By what Agency and on what general terms, the Tramways shall be constructed and worked ?

On the 21st of April 1871 the Committee reported as under :—

That the Committee recognises the advantages of Street Tramways to facilitate the traffic of crowded thoroughfares, but it is of opinion that before any attempt is made to lay Tramways in the Native Town, some experience should be gained of the more open thoroughfares of Bombay.

With reference to the second point, the Committee recommend, therefore that Tramways should be laid in the first instance on the three following lines :—

- (a) From Mazagaon (Lawrence de Lima Street) Frere Road and Eastern Boulevard (thereafter, behind the Town Hall) ; Marine Street to Victoria Bunder.
- (b) From Arthur Crawford Market, by Market Road to Bazaar Gate and Hornby Road, to Frere Fountain.
- (c) From Money School to Church Gate Street, and on to Scotch Church Rampart Row.

With reference to the third point referred to it, the Committee is of opinion that it is very desirable that the Corporation should itself lay and maintain any Tramways that may be determined upon, issuing licenses to those who wish to run conveyance thereon. If this is not considered possible at present, the concession, to whomsoever made, should be for a term of five years certain with the option to the Corporation of purchasing property at the termination of the lease.

Messrs. Stearns Hobart & Co., under their letter dated March 14th, 1872, stated their willingness to accept the stipulations recommended by the Committee with certain modifications.

On 19th March, 1872, Messrs. Lawrence & Co. also wrote to the Municipal Commissioner enquiring on what terms the Municipality was prepared to grant them the concession.

On the 25th March, 1872, the British and Foreign Tramway Co. applied to the Municipality through their Engineer and Agent, who was on a visit to Bombay, for a concession to lay Tramways in Bombay under certain terms proposed by them.

On 27th March, 1872, another application was submitted to the Municipality by a representative of an Engineering firm in England.

Ultimately Messrs. G. A. Kittridge and F. W. Stearns, of Messrs. Stearns Hobart & Co., succeeded in securing the Concession under the Deed of Agreement dated 1st March 1873.

The principal clauses of the Agreement were :—

1. The said Justices grant to the said William French Stearns and George Alvah Kittridge, and their assigns, the right to construct, maintain, and use a tramway or tramways, with single or double tracks, to and from the stables of the grantees or their assigns on the following routes, and between such other places any by such other routes as may be hereafter approved of by the Municipal Commissioner for the City of Bombay.

2. The said grantees or their assigns shall have power, from time to time, to fix the rates of fares for carrying persons and goods in the cars or carriages to be run on the said tramways, provided that the rates of fares, on at least one-half of the cars or carriages available for passengers which daily run on the said tracks, shall for any distance not over three miles not exceed three annas, and be for any greater distance in the same proportion.

3. The provisions of this agreement shall remain and be in force for a term not less than 21 years from the date thereof. The Corporation shall have the right of purchasing the said tramways, with the plant, stores, rolling-stock, and everything connected therewith, after the expiration of the said 21 years, upon declaring its intention so to do within six months after the expiration of the said 21 years, and shall have a renewed right of purchase at the end of every seven years after the expiration of the said 21 years upon similar notice being given: the amount to be paid in the event of such purchase shall be actual *bona fide* value, exclusive of any compensation for good-will, premium, compulsory sale, or other consideration whatsoever of the tramways, and of the work and materials connected therewith, and of the lands and buildings and all other property of the grantees, such value, in the case the parties do not agree, to be decided by arbitration as hereinafter provided, and for the good-will, premium, compulsory sale and other consideration of the business of the grantees, an amount equal to 21 years' purchase, calculated on the average profits of the previous three years, 4 per cent. per annum on the above value as paid being first deducted from such profits.

4. In consideration of the concession herein granted, the said grantees undertake, on behalf of themselves and their assigns, that they will pay to the Municipal Corporation of Bombay a yearly rent of Rs. 3,000 per mile of double track and Rs. 2,000 per mile of single track, payable half-yearly; the date on which such

rent on each line of tramways shall begin to accrue shall be the date on which such line of tramways is opened for public traffic.

Thereupon a Company styled The Bombay Tramway Company Limited was floated in New York, but registered in Bombay in March, 1873.

Subsequent to the date of execution of the Agreement an Act was passed by the Bombay Government, authorising the making and regulating the working of street tramways in Bombay, *viz.* The Bombay Tramways Act, I of 1874.

CAPITAL OF THE COMPANY.

The Authorised Capital of the Company was Rs. 20 lakhs divided into 10,000 shares of Rs. 200 each, which was increased to Rs. 24 lakhs in 1875.

The whole of the Capital was raised in New York and up to the time of the final winding up of the Company in 1905, practically all the shares were held there. During the last few years of its career a few shares found their way to Bombay.

No dividend was declared from the start of the Company in 1873 to the end of 1885. The whole of the net revenue during the period was expended in developing the Company's business.

The Company was financially reconstructed in 1885, which took over the entire concern at a valuation of Rs. 50 lakhs divided into Rs. 30 lakhs of shares of Rs. 100 each and Rs. 20 lakhs of Debentures of Rs. 1,000 each.

These shares were distributed amongst the shareholders of the Old Company in the proportion of $2\frac{1}{2}$ new shares for every Rs. 200 old share of the Old Company.

Further the Old Company's shareholders were given one Debenture of Rs. 1,000 for every $6\frac{2}{3}$ Old Shares.

ESTABLISHMENT.

In the commencement, Messrs. Stearns Hobart & Co. were appointed Local Agents of the Company on a remuneration of Rs. 3,000 per annum. Their offices were situated on the Esplanade Road, opposite the University Gardens.

Mr. G. A. Kittridge was appointed Managing Director and Mr. Pickering Clark as Visiting Director. Mr. Kittridge retired in 1887 as Managing Director and was appointed Visiting Director. Mr. Rimington who had joined the Bank of Bombay in 1875 and had become Agent at Ahmedabad at the time of leaving it, was appointed Deputy Manager of the Company in 1884. He assumed charge of the Managing Directorship in 1887, which office he continued to hold up to the final winding up of the Company in August 1905, and in the B.E.S.T. Company up to 30th April, 1922.

The establishment was removed under the Company's own management in 1880 to a building opposite the Bank of Bombay.

The Stables and the Stores Department were situated on a plot of land on the Colaba Causeway, secured from Government on a short term lease where the present Offices and Depôts, etc., stand. In 1883, the offices were transferred from the old premises to the building erected thereon in Colaba Causeway.

HORSES.

The Company started operation with 200 horses, of which 100 horses together with 20 omnibuses were bought from the Bombay Omnibus Company for Rs. 30,000. From this small beginning the number of horses was increased from time to time till at the final winding up of the business they numbered 1,360.

The horses were of two classes. Gulf Arabs for Double Horse Cars and Walers for Single Horse Cars. The average price paid was Rs. 400 for a Gulf Arab and Rs. 600 for a Waler.

CARS.

Closed Double Horse Cars.—Four cars of this type were imported from America. They were closed on the sides, the same as we now have, but with longitudinal seats with a seating accommodation for 24 passengers and standing room for a dozen more. As they were found unsuitable for the Company's requirements they were discarded.

Double Horse Open Cars and Single Horse Open Cars.—The first batch of 23 of each of these types was imported from America. Subsequently all the cars required were built

in Bombay in the Company's Workshops. Only castings and wheels were imported, chiefly from America.

The number was increased from time to time till at the time of the final winding up of the Company in 1905 they stood at 91 Double Horse Cars and 104 Single Horse Cars. The cost of each was about Rs. 950 and Rs. 725 respectively.

THE LAYING OF THE FIRST SECTION OF THE LINE.

The work of constructing the line was entrusted to Messrs. Glover & Co., Contractors, under the supervision of Mr Whitman, a specialist from New York.

The first sod was turned on the 1st January, 1874, and the Grant's Buildings end (Colaba) and the sections between Grant's Buildings and Pydhownie (*via* Crawford Market) and Bori Bunder and Pydhownie (*via* Kalbadevi) were opened for traffic on 9th May, 1874.

FARES.

In the commencement the fares were fixed at 3 annas per trip between Pydhownie and Grant's Buildings and half anna from Market to Bori Bunder in competition with "rekas" (bullock garies).

For the first 5 months no tickets were issued. The fares were collected by the Conductors, and as there was not adequate check, it meant considerable leakage through misappropriation.

After some experience the fare was reduced to 2 annas per trip, and ultimately they were fixed at $\frac{1}{2}$, 1, $1\frac{1}{2}$ and 2 annas. In 1899, the one anna uniform fare was introduced.

WINDING UP OF THE COMPANY.

The Corporation did not exercise their first right of purchase accrued on the 12th March, 1894, on the expiration of the first period of 21 years under the Deed of Concession.

On the 19th July, 1899, the Company applied for sanction of the Corporation to convert the Tramways in the City from horse traction to electric traction on the overhead system. In this connection the Managing Director wrote :—

The cost of converting our lines to electrical traction would be very heavy, amounting it is estimated to fully rupees fifteen lakhs;

and as a condition to our proceeding with the scheme we must ask that the Corporation undertakes not to exercise its option to purchase the tramway on the 12th March, 1901, and also not to exercise it for a period of fourteen years from that date.

After long deliberation the Corporation decided to exercise their right of purchase accrued on the expiration of the second period of seven years, and served the Company with a notice to that effect on 12th March 1901.

Before the Corporation gave formal notice to the Tramway Company of its intention to exercise the right to purchase the undertaking, the Corporation entered into an agreement dated 11th March, 1901, with one William Gentry Bingham (called Promoter in the said agreement) on certain terms.

The Company then filed a suit against the Corporation contending that proper notice had not been given, and therefore they were debarred from exercising their right to purchase. Protracted litigation ensued and the matter went up to the Privy Council, but the question was right through decided against the Company.

In the meantime the valuation of the Company's assets was referred to arbitration, and a sum of Rs. 34 lakhs was awarded in respect thereof on 13th September 1902.

The question of ascertaining the amount of good-will to be paid to the Company was referred to the Commissioner for taking Accounts. After several sittings the parties came to terms and a sum of Rs. 61,99,990 was fixed in respect thereof.

As great delay was caused in completion of the purchase of the Tramways and of putting into complete operation the said agreement of 11th March, 1901, by the pending litigation, an agreement dated 23rd January, 1903, was entered into between the Corporation and the Brush Electrical Engineering Company, Limited, whereby the Brush Company were to commence the introduction and installation of Electric Lighting and Power in and throughout the City and Municipal Boundaries of the Island of Bombay in anticipation of and until the completion of the purchase of the Tramways by the Municipality and the putting into complete operation of the said agreement of the 11th March, 1901. Under the terms of this agreement the rights and obligations of the parties under the agreement of 11th March, 1901, were not to be

affected in the event of its being finally held and established that the Corporation had acquired the right of purchase of the Tramways, in which case the agreement of the 11th March, 1901, was to continue to hold good in its entirety, not only as to the Tramway Concession but also as to the Light and Power Concession. In the event of its being finally decided that the Corporation had not acquired the right claimed in the suit of purchase of the Tramways, the agreement dated 23rd January, 1903, was to be taken to be substantive and enduring in all respects.

Ultimately the concern was taken over by the Bombay Electric Supply and Tramways Company, Limited, on 2nd August, 1905, on payment of Rs. 98,49,990 made up of Rs. 34 lakhs as per Arbitrator's award, for the Company's Tangible Assets, Rs. 2,50,000 for additions made thereto after the award, and Rs. 61,99,990 for good-will.

Out of this sum of Rs. 98,49,990, Debentures amounting to Rs. 18,00,000 were repaid, and the shareholders received Rs. 276 for each Rs. 100 share.

The Company ceased to exist on 2nd August, 1905, when the present Company began to function. The first electric car was run on the 7th May, 1907.

Below is given a comparative statement showing certain figures when tram-cars were started in Bombay on 9th May, 1874, and those on 1st August, 1905, (when The Bombay Tramway Co., Ltd., was wound up) and on 31st December 1935 :—

—	Date.	No. of Passengers carried.	Cash received.	No. of Cars.	No. of Horses.	Total Route Mileage.
			Rs. a p.			
Old B. T. Co., Ltd.	9-5-1874	451	84 0 0	6	44	2.77
B. T. Co., Ltd.	1-8-1905	71,947	4,250 14 6	195	1,360	17.23
B. E. S. & T. Co., Ltd.	31-12-1935	237,506 including Buses.	18,217 11 6 including Buses.	438 + 100 Buses.	..	30.87

PART I.

CONSTITUTION.

CHAPTER I.

Negotiations with the Bombay Municipal Corporation for the purchase of The Bombay Tramway Company, Limited.

Under the Deed of Agreement, dated 12th March 1873, Messrs. G. A. Kittridge and F. W. Stearns of Messrs. Stearns Hobart & Co., an American trading company, secured the concession from the Municipality to lay and operate tramways in Bombay, and they floated a company styled "The Bombay Tramway Company, Limited," in New York and registered it in Bombay in March 1873.

One of the terms of the Agreement was :—

The provisions of this Agreement shall remain and be in force for a term not less than 21 years from the date thereof. The Corporation shall have the right of purchasing the said tramways, with the plant, stores, rolling-stock, and everything connected therewith, after the expiration of the said 21 years upon declaring its intention so to do within six months after the expiration of the said 21 years, and shall have a renewed right of purchase at the end of every seven years after the expiration of the said 21 years upon similar notice being given.

On the expiration of the first period of 21 years the Corporation did not exercise their right of purchase, under the Deed of Concession, on the 12th March 1894.

However, before the expiration of the second period on the 19th July 1899, the Company applied for the sanction of the Corporation to convert the Tramways in the City from horse traction to electric traction on the overhead system. In this connection the Managing Director wrote :—

The cost of converting our lines to electric traction would be very heavy, amounting it is estimated to fully rupees fifteen lakhs ; and as a condition to our proceeding with the scheme

we must ask that the Corporation undertakes not to exercise its option to purchase the tramway on the 12th March 1901, and also not to exercise it for a period of fourteen years from that date.

Reporting on the application the Municipal Commissioner stated that as the right of purchase would fall in on March 1901 the Corporation should consider the matter in all its bearings and decide whether they should agree to the condition asked for by the Company, or let its consideration stand over till 1901. He laid great stress on the desirability of not waiving the right of purchase till 1915 without full inquiry, because it seemed to him unlikely that the Corporation would have as favourable an opportunity again as with the electrification of the tramways the working expenses would be considerably reduced, with the result that the amount of goodwill, which was to be calculated on the average profits of the last three years would be so great as to render purchase less profitable to the Corporation.

The matter was referred for consideration and report to a Committee.

Before the Committee could make its report the Managing Director of the Company addressed the Commissioner on the 16th October 1900 as follows :—

No reply having been received from you to the application dated the 19th July 1899, addressed to you by this Company requesting sanction to substitute electric traction for horse traction on its lines of tramway, I am instructed by my Directors to withdraw and cancel the said application and I hereby do so.

In view of the withdrawal and taking into consideration all the circumstances the Committee came to the conclusion that if the purchase was not effected at the next option, or if that option was not utilised for arranging better terms, the opportunity would be lost for ever.

The Committee were, however, not prepared at once to recommend the Corporation to arrange for the outright purchase of the Tramway, but preferred to give a fresh concession to the present Company provided it agreed to revise the arrangement of 1873, by which it had enjoyed for 21 years the benefits of a too liberal concession, on the basis of securing

advantages more equal to both the parties, or to some new Company on more favourable terms than those subsisting.

In the meantime definite proposals were received from the firm of Messrs. Killick Nixon & Co. on behalf of their London Principals for the purchase of the Tramway business provided they were granted a concession for 50 years and agreeing that the purchase price to be paid by the Municipality at the end of that term be only the then value of the land, plant, etc., without any compensation for goodwill. Their application was also subject to their being granted a License for the Electric Light and Power Undertaking.

After taking into consideration all the facts, the Committee submitted *inter alia* the following recommendations to the Corporation :—

(1) That the Tramway Co. be invited to make a firm offer to the Corporation on or before the 12th February 1901 of the conditions on which they would be prepared to accept a continuance of the concession on the understanding that :

(I) At the end of the renewed period the Corporation should have the option of purchase on payment of *bona fide* value only with nothing for goodwill, and (2) that electric traction should be introduced within three years.

(II) That Messrs. Killick Nixon & Co. be informed that the Corporation consider 50 years too long a term for the concession, and be asked to make a firm offer to the Corporation of their proposals on or before the 12th February 1901, giving at the same time full security for the performance of their undertaking, it being distinctly understood that they must introduce electric traction within three years.

The Committee further recommended that in inviting the offers from the parties concerned they should be given the option of combining with the Tramway concession the Electric Light and Power concession.

On submission of the Committee's Report to the Corporation the following Resolution No. 10173, dated 18th December 1900, was passed :—

That on the general lines of the recommendations contained in the reports the following Councillors be asked to carry on, in consultation with the Municipal Commissioner for the time being, negotiations

with the parties mentioned in the Reports, as well as any other parties that may be coming forward, and to report to the Corporation, as early as possible, such proposal or recommendation as they may consider most practical and beneficial.

This Committee submitted the undermentioned Report on the 26th February 1901 :—

1. The Committee met immediately after the Christmas holidays, and after consideration of such papers as were before them, resolved to request the Commissioner to communicate with all the parties who were interesting themselves in the proposed Tramways and Electric Light and Power concessions and supply them with all necessary papers and give them time till the 14th of February 1901 to make firm offers, and also to communicate with the Bombay Tramway Company to ascertain what terms, if any, they were prepared to offer for a continuance of the concession they now hold.

2. The reply of the Bombay Tramway Company to the Commissioner's communication is quoted in full for the information of the Corporation :—

“ In reply to the first enquiry in your letter No. 26131 of 4th ultimo, I am requested by my Directors to say that they are unable for a moment to entertain the proposal to sacrifice the compensation for good-will secured to this Company by the terms of the Tramway Act (I of 1874) in the event of the Municipality ever deciding to exercise its option of purchasing the business, and that they must respectfully decline the offer of the Corporation, based on that stipulation. I am further to say that, should the Municipality decide to purchase the Tramway and serve us with notice to that effect, this Company will do all in its powers to aid in determining the amount of the payment. Should, on the contrary, the Municipality decide not to purchase the Tramway, and desire to provide for electric traction being introduced, this Company will, after such decision, be willing to re-open that matter with the Municipality and will endeavour to arrive at a mutually advantageous understanding ”.

3. It will be seen that the Tramway Company have declined to entertain any proposal for a renewal of the concession if one of the stipulations for such renewal is to be the wiping off after a term of years of compensation for goodwill now payable to them under Act I of 1874. Under the circumstances, the Committee think the Corporation are fully justified in proceeding to determine the concession given to the present Company and enter into a fresh arrangement with a new Company.

4. By the date fixed by the Committee, only two firm offers were received by the Commissioner for the combined Tramway and Electric Light and Power Concession. One of these is from Messrs. Killick Nixon & Co., who offer, on behalf of themselves, and Messrs. Kilburn & Co. of Calcutta and Messrs. Crompton & Co. of London. The other

is from the British Pioneer Electric Light and Power Co. of India (Broad Street Avenue, London), who are at present represented in Bombay by their duly constituted Attorney and Engineer, Mr. W. G. Bingham. . . . The essential points of the two offers are briefly stated below :—

5. The Pioneer Company give to the Corporation the option of purchasing the Tramways and the Electric Installations :—

(1) after 33 years from the date of the signing of the deed of concession on payment of the then value of the whole concern, plus the whole of any sum paid by them to the present Company for goodwill ;

(2) after 42 years from the date of the signing of the deed of concession on payment of the then value of the whole concern, plus one-half of the sum paid by them for goodwill, and

(3) after 58 years on payment of value only, with no payment whatsoever for goodwill.

For the carrying out of their undertaking they undertake to provide approved security to the satisfaction of the Corporation up to the full amount of the purchase price, which may be found to be payable to the present Tramway Company, and on their behalf the Brush Electrical Engineering Co. of London, which is known to be a stable Company with large resources, who have telegraphed to the Commissioner to say that they guarantee capital for the purchase of the Tramways, including goodwill, construction and equipment.

They offer the same track rent as is payable by the present Company for the privilege of running cars along all streets which are at present served by the horse tramways, but only half the present rate per mile for any extensions, whether in existing streets or any new streets to be made hereafter. They offer a service of not less than 10 minutes throughout the City, and agree to a uniform fare of one anna from any point throughout the City to any other point so far as the present lines extend.

Messrs. Killick Nixon & Co. give option of purchase as follows :—

(1) after 42 years on payment of value, plus 25 lakhs of rupees for goodwill ;

(2) after 52 years on payment of value, plus 15 lakhs of rupees for goodwill ; and

(3) after 62 years on payment of value, without any payment for goodwill.

They are also prepared to give a guarantee to carry out the undertaking, or, in default of doing so, to indemnify the Corporation against any loss.

They offer the same track rent as at present for all existing and future lines, except such as are laid beyond the existing northern termini of the Tramways, for which they offer to pay at half the present rates. They agree that their Company shall be so constructed that in the event of any bonus or dividend being declared in excess of 10 per cent. one-third of the excess shall be paid to the Municipality.

They do not bind themselves to a uniform fare of one anna, or any other fare, or to any fixed minimum of intervals of service; but desire the same privileges as to fixing fares and services as are enjoyed by the present Company.

They desire to bind the Corporation to hand over the Tramway undertaking to them on a date to be absolutely fixed, or to pay interest on their capital from that date up to such date as the Tramway is handed over, and they wish to stipulate that they are to pay down 80 lakhs of rupees on the concern being handed over to them, and give security for payment of whatever may be payable over 80 lakhs under section 30 of the Bombay Tramway Act.

7. As regards security for carrying out the contract, Messrs. Killick Nixon & Co., in the first instance, propose to bind themselves to give a penalty of about Rs. 2½ lakhs in the event of failure, leaving the Corporation to face such further loss as might accrue. The Committee, however, decided that they could not recommend the Corporation to take action on anything less than an absolute guarantee, and it will be observed that on this being communicated to Messrs. Killick Nixon & Co., they have made their original condition more onerous by stipulating for the payment of a lump sum at the end of 42 and 52 years. The letter, dated the 26th February 1901, from Messrs. Killick Nixon & Co., shows how the question of security stands at the time of writing this report. Any further communication that may be received from them will be placed before the Corporation.

8. The Committee are unanimously of opinion, and the Commissioner concurs with them, that the terms offered by Messrs. Killick Nixon & Co. are less favourable than those of the Pioneer Company. The Pioneer Company's terms for extinction of goodwill are slightly better than Messrs. Killick Nixon & Co.'s. In the matter of track rent Messrs. Killick Nixon & Co.'s terms are better than those of the Pioneer Company, but it is impossible to say by how much. It may be mentioned that track rents on streets made by the Improvement Trust will accrue to that Body and not to the Corporation. Messrs. Killick Nixon & Co.'s proposal to give the Corporation a one-third share in any dividend or bonus in excess of 10 per cent. is not, the Committee consider, of much value, considering that, with the large sum payable for goodwill, the chances of a bonus or dividend much in excess of 10 per cent. are small, and the Corporation's share is to be only a third of the excess. Their stipulation of delivery by a fixed date may prove most inconvenient and embarrassing in the event of any unforeseen delay occurring in arranging the purchase with the Bombay Tramway Company, and it will be seen that Messrs. Killick Nixon & Co. impose on the Corporation the obligation of doing their best to obtain the most favourable possible purchase for them, to do

which may involve delay beyond any reasonable date that might be fixed. Their condition of paying down 80 lakhs of rupees, on delivery, pending settlement of the price, and giving security for the balance, might also prove most inconvenient in the event of the Court requiring a deposit to the extent of the full amount claimed.

In regard to fares and intervals of service also, their terms are distinctly unfavourable, unless they should hereafter agree to terms similar to those proposed by Mr. Bingham.

8. The Municipal Commissioner has, in consultation with the Municipal Solicitors, drawn up a schedule of the conditions to be embodied in the agreement which may be made with any Company for the Tramway and Electric Concession. Mr. Bingham, on behalf of the Pioneer Company, has agreed to all the items in the schedule. In regard to Messrs. Killick Nixon & Co.'s offer, there is no one in Bombay with authority to agree to those or any stipulations. They propose that any terms the Corporation may wish to propose at variance from their offer, or the existing agreement with the Tramway Company, should be settled hereafter by mutual consent, and the Committee do not feel justified in recommending that such important details should be left over for future discussion, which may lead to disagreement.

9. On the whole, it seems to the Committee, in whose opinion the Commissioner concurs, that the Pioneer Co.'s offer is more favourable and definite than that submitted by Messrs. Killick Nixon & Co., and they beg strongly to recommend to the Corporation that, subject to advices from London in respect of the guarantee being satisfactory, the Commissioner be invested with full authority to make all necessary arrangements for making over to that Company the joint Tramway and Electric Lighting and Power undertakings on the terms offered and agreed to by their Agent, Mr. Bingham, and to give legal notice to the Bombay Tramway Company of the Corporation's decision to exercise the right of purchase given to them by the Bombay Tramway Act, Sec. 30.

10. The Committee beg to state that the Commissioner has arranged with the Municipal Solicitors to have a guarantee-bond drawn up in England by their Agents and to have it executed there without loss of time, so that the Corporation might be in a position to give notice to the Tramway Company not later than the 11th March 1901, by which date, the Committee are advised, it is desirable, though probably not essential, to give notice of intention to purchase under Section 30 of Act I of 1874. To admit of this being done, it is necessary that the Corporation should arrive at an immediate decision on the subject of the purchase of the Tramways.

11. It has also been arranged by the Commissioner that certain eminent financial authorities in London should satisfy themselves and advise the Commissioner that the parties to the guarantee bond are of such stability and position as to be relied on for the whole amount required. Advices from these authorities are very shortly expected, and will be reported to the Corporation in due course; but in the

meanwhile the Committee think it desirable that their report, with necessary accompaniments, should be placed in the hands of Councillors, in order to admit of a decision being arrived at with the least possible delay.

12. In conclusion the Committee cannot refrain from recording their high appreciation of the very important service which Mr. W. L. Harvey, the Municipal Commissioner, has rendered to the Corporation in arranging for a satisfactory solution to the many and involved problems incidental to the acquisition of the Tramways and to their conversion from horse to electric traction.

*Accompaniments to the Report of the Committee regarding the
Tramways and Electric Light and Power Concessions.*

THE PIONEER ELECTRIC LIGHT & POWER Co. OF INDIA

27-28, BROAD STREET AVENUE, LONDON, E.C.

BOMBAY, 14th February 1901.

To

W. L. HARVEY, Esqr.,

MUNICIPAL COMMISSIONER, BOMBAY.

SIR,

I have the honour to ask the consideration of the Municipal Corporation of Bombay to the following proposals, with reference to the important question of providing a comprehensive service of Electric Tramways for the City of Bombay.

I may premise that, as Attorney and Engineer of the New Zealand Electric Light & Traction Company of 27-28, Broad Street Avenue, London, E.C., whose members are largely interested in electric light and traction enterprises, I concluded, last year, an Agreement with the Corporation of Auckland, which has since received the authorisation of the Government of New Zealand, by an Order-in-Council whereby that Corporation has delegated to a Company, formed under the joint auspices of the New Zealand Electric Light & Traction Company and the British Electric Traction Company of Dorrington House, London, W.C., called the Auckland Electric Tramways Company, Limited, who have acquired the present horse tramways, the right to construct, equip, and work electric tramways in the City of Auckland and its suburbs. The works for the construction and equipment of these tramways are, by the Deed of Delegation, to be carried out under my superintendence, and I am, moreover, the Attorney and Engineer of the Auckland Electric Tramways Company, Limited.

I also obtained last year, a concession from the Corporation of Adelaide, South Australia, for the construction, equipment and working of electrical tramways for that city. The Bill promoted by the Corporation of Adelaide for this purpose in the late Session of the South

Australian Parliament, however, was ruled out by the Standing Orders Committee as being informal, but I have every hope that the Bill in its amended form, will pass next Session. Under the Agreement with the Corporation of Adelaide, the works for the construction and equipment of the electrical tramways there are to be carried out under my superintendence, and I am the Attorney and Engineer for that purpose of the Adelaide Electric Tramways Company, whose Registered Office is at 27-28, Broad Street Avenue, London, E.C.

With this preface I now proceed to lay before the Municipal Corporation of Bombay, in brief, the conditions and terms upon which I offer, on behalf of the Pioneer Electric Light & Power Company of India, to convert the tramways of Bombay to electric traction, and I beg to apply to the Municipal Corporation of Bombay for a concession in terms thereof :—

1. I offer, on behalf of the Pioneer Electric Light & Power Co. of India, and in the event of your Corporation accepting the proposals hereinafter contained, to form a Company, to be called The Bombay Electric Light & Traction Co., Ltd., with a capital of one million pounds (£1,000,000) sterling, the said Company to be registered and have its principal Board in London, but to be registered also in Bombay under the Indian Companies Act.

2. The Company to be formed as above shall, when duly constituted and authorised construct and equip within and for the City of Bombay a system of tramways to be worked by electric traction, by means of the overhead system, in which the current of electricity is supplied to the car motors from a trolley wire. The installation throughout to be up-to-date with plant and machinery of the highest class suitable for the efficient service of the City to the satisfaction of your Corporation.

3. The route of the tramways to be as at present with such modifications as may be required by your Corporation.

4. The gauge of the tramways shall be the present gauge or such as may be approved by your Corporation having regard to what may be best in view of the gradients, curves, and form of cars to be adopted.

5. The details concerning the trolley wire, return current, and the like, to be in accordance with the Rules laid down in the Notification of the Government of India, Public Works Department, No. 361 (Telegraphs), dated 6th September 1900.

6. The details as to the construction of the track to be to the satisfaction of the Corporation as expressed through the Executive Engineer to the Municipality.

7. The Company to keep the roadway in repair between the outer rails and for 18 inches on the outer sides thereof with similar materials to that of which each roadway is composed.

8. The rates of speed at which the tram-cars shall be propelled on the tramways shall be such as shall be laid down by the Corporation, provided the rate shall not exceed 12 miles per hour within the City.

9. The design and method of construction of all the cars to be to the approval of the Corporation.

10. The cars shall be well lighted by electricity and bear at night time lamps of distinctive colours to indicate the direction of their course.

11. The cars shall commence running each day not later than 6-30 a.m. and the service will continue to at least 11-30 p.m.

12. The service shall be not less than a 10 minutes' service throughout the City.

13. The fare to be one anna from any point throughout the City to any other point so far as the present lines extend.

14. The tramways may be used at the Company's discretion for both passenger and goods traffic and a sufficient number of cars, necessary for the effective supply of the public, shall be provided by the Company.

15. The concession to grant and include the sole and exclusive right for the Company to construct, equip, and work tramways by electric or other traction within the City for the term of forty-five years, including the period of construction and conversion, or until such time sooner or later as the Corporation may choose to exercise the powers of purchase reserved to them in Clause 30 under this proposal.

16. As to the consideration to be paid to the Corporation in exchange for the concession, the rental for the use of the streets to be the same as that at present paid by the Bombay Tramway Company, Limited, for the privilege of running cars along all streets which are at present served by the horse tramways, but in any future extension or extensions through or along any new streets to be made hereafter by the Corporation or any of the existing streets not now traversed by the horse tramways, then the rental payable to the Corporation shall be half of the rate, per mile, whether single or double track, now paid by the Bombay Tramway Co., for privilege to run their present horse tramways.

17. The above rental for the use of the streets to be in lieu of and include all charges, licenses, rates, municipal and other taxes, etc., and to be the only impost payable to the Corporation or other authorities.

18. The concession to be for the exclusive right of supplying electricity not only for traction but for lighting and all-power purposes within the City of Bombay.

19. I undertake, on behalf of the Company, to provide plant within the expiration of three years from the final grant of the concession, sufficient to furnish current for supplying 12,000 lamps each of 8 candle-power, throughout a compulsory area hereafter to be settled between myself and the Corporation and to lay the requisite mains underground along the streets of the compulsory area to be so agreed upon.

20. The prices to be charged for current for the respective purposes shall be as under :—

(a) Maximum rate eight annas per Board of Trade Unit for electricity for all purposes with a minimum charge of rupees twenty per quarter.

(b) For private lighting purposes six annas per Board of Trade Unit.

(c) For public lighting purposes three annas per Board of Trade Unit.

(d) For power purposes three annas per Board of Trade Unit.

21. At the expiration of the concession the Corporation shall purchase the tramways with all the plant and stock used for traction, lighting, and other purposes, belonging to the Company at their then value as a going concern, without any allowance for their lease but with such an additional payment in regard to the sum paid by the Company to the Bombay Tramways Co., Ltd., for goodwill as is contained in Clause 30 of these proposals.

22. The valuation shall be made by arbitration in the usual way. In the interests of the City, and so as not to unduly increase the valuation, the plant and rolling stock at the end of the concession shall not be in excess of the normal requirements during the last two years of the concession.

23. The Deed of Delegation to contain such general and ordinary clauses as to legal matters as the Municipal Solicitors and the Company's Solicitors may mutually agree upon ; as to technical matters, such general and ordinary clauses as the Executive Engineer to the Municipality and I may mutually agree upon ; and as to other general and ordinary clauses such as the Corporation and I may mutually agree upon.

24. As to the period to be allowed for construction I undertake, on behalf of the Company, to complete the works within three years from the date when the Corporation shall execute and deliver to me or the Company the final Deed of Concession or Delegation subsequently to their obtaining all the necessary powers from the Government.

25. The Company shall not be liable as regards the completion of the works for any delay which may be caused by reason or on account of any strike or combination of workmen, or any lock-out of workmen, or any riot or civil commotion, or by the outbreak of hostilities of war, the act of God, unavoidable accident, or any other circumstances whatsoever beyond the control of the Company (exclusive of the want of funds) or any similar cause and no such delay as aforesaid shall be deemed a default on the part of the Company, and in the event of any delay caused as aforesaid, the Company's time-limits shall be correspondingly and proportionately extended.

26. As to the construction of the tramways and the electrical equipment, these are to be carried out under my superintendence and to my specification, or in the event of my being prevented from illness or other causes, by a competent Electrical Engineer to be nominated by me.

27. With reference to the purchase of the present Tramways, together with all their rights, I undertake, on behalf of the Pioneer Electric Light & Power Co. of India, to find the necessary funds for the purchase of the present undertaking, including the goodwill payable to the Bombay Tramway Co. under their Agreement with the Corporation dated the 12th March, 1873.

28. Inasmuch as the sum to be paid to the Bombay Tramway Co. in regard to the item of goodwill is referable by the Corporation to arbitration, in the event of any dispute arising between the Corporation and the Company as to the exact meaning of the Clause and as I have engaged by the preceding clause to make the Pioneer Electric Light & Power Co. of India responsible for the amount payable in respect of this goodwill, I must stipulate that the Corporation delegate to my Company the requisite powers to carry on the negotiations for the purchase, and failing Agreement the power to appoint arbitrators on behalf and in the name of the Corporation.

29. I undertake on behalf of the Pioneer Electric Light & Power Co. of India that they shall give approved security to the satisfaction of the Corporation that the purchase money requisite for buying out the rights and property of the present Horse Tramway Co. shall be forthcoming when required.

30. The above offer is dependent on the Corporation's acceding to the undermentioned stipulations in regard to the re-purchase by the Corporation of any portion of the undertaking, failing compliance with which the Corporation shall have no right to purchase any part of the Company's business :—

The Corporation shall have the right of purchasing from the Company, meaning thereby either the Pioneer Electric Light & Power Co. of India, or any Company it may form for the purposes of these presents.—

(a) At the expiration of thirty years from the completion of the work of conversion on paying the Company then holding and exercising this concession the then value of the plant and stock, mains, premises, buildings, etc., as a going concern, plus the whole of any sum the Company so holding the concession may have paid to the Bombay Tramway Co., Ltd., in respect of goodwill.

(b) At the expiration of forty-two years from the completion of the work of conversion on paying the then value of the plant, stock, mains, premises, buildings, etc. as a going concern, plus one-half of the sum the Company holding the concession may have paid to the Bombay Tramway Co. in respect of goodwill.

(c) At the expiration of sixty years from the completion of the work of conversion on paying the then value of the plant, stock, mains, premises, buildings, etc., as a going concern without any allowance in respect of goodwill paid to the Bombay Tramway Co.

31. Goodwill in the preceding clause shall be taken to be any sum the Company holding and exercising the concession may have paid to the Bombay Tramway Co., Ltd. over and above forty lakhs of rupees.

32. In the event of the Corporation exercising the right to purchase at any period named in Clause 30 the payment for the undertaking shall be made within six months by the Corporation after the giving by them of their notice to purchase which shall be not less than three months prior to either of the three periods respectively mentioned in the said clause.

I am, etc.,
(Sd.) W. GENTRY BINGHAM,
Attorney & Engineer of
The Pioneer Electric Light & Power Co.
of India.

Proposed by the Hon'ble Mr. Pherozeshah M. Mehta, C.I.E., and seconded by Sir Bhalchandra K. Bhatawadekar, Kt.

Resolution No. 12862, dated 28th February 1901.—

"That the Report of the Committee, appointed by Corporation Resolution No. 10173, dated the 13th December 1900, to negotiate with parties, who may be willing to take over the concession of working the Bombay Tramways and supplying Electric Light and Power in the City, and to submit to the Corporation such proposal or recommendation as they may deem practical and beneficial, be approved and adopted.

2. "That a copy of the Report be forwarded to the Municipal Commissioner and he be authorised (subject to the advices expected by him from London in respect to the stability and position of the parties to the guarantee bond being satisfactory in his opinion, and that of the Committee to be appointed by para 3 of this Resolution), to make all necessary arrangements for carrying out the Contract arranged on behalf of the Pioneer Electric Light and Power Company in India by their Attorney, Mr. W. Gentry Bingham; and to give legal notice to the Bombay Tramway Company of the Corporation's intention to exercise the right of purchase of the Tramways given to them by Section 30 of the Bombay Tramway Act I of 1874, which intention the Corporation hereby declare; and to make to the Government of Bombay such communications on the subject as may be necessary.

3. "That a Committee composed of the Councillors named in the margin be appointed to assist the Commissioner in the carrying out of the necessary arrangements with a request that they will report to the Corporation the arrangements finally made, and that the Commissioner be requested to work in consultation with this Committee.
- The President (for the time being).
 The Hon'ble Mr. Pherozeshah M. Mehta, C.I.E.
 Sir Bhalchandra K. Bhatawadekar, Kt.
 The Hon'ble Mr. Ibrahim Rahimtoola.
 Mr. John R. Greaves.
 Mr. Dinsha Edulji Wacha.
 Mr. Manmohandas Ramji.
 Mr. Vitthal Das Damodar.

4. "That the Corporation fully concur in the Committee's high appreciation of the very valuable services which the Commissioner, Mr. W. L. Harvey, has rendered in this important and very responsible business, and they desire that their best thanks be conveyed to Mr. Harvey."

Carried nem con.—(35 Councillors voting for and none against.)

Extracts from the Minutes of Corporation Meeting held on the 11th March 1901.—

The Corporation considered the following :—

Letter from the Commissioner, No. 32083, dated the 6th March 1901.

"With reference to Corporation Resolution No. 12862 of the 28th February 1901, I have the honour to report that I have received telegraphic information through the Municipal Solicitors to the effect that the British Pioneer Electric Light and Power Company of India have not, in the opinion of our legal advisers in London, power under their Articles of Association to enter into a contract for the acquisition of the Bombay Tramways. I have at the same time been advised that in the event of the Corporation agreeing to enter into the contract with Mr. W. G. Bingham in his personal capacity which it was proposed to enter into with him as agent and attorney of the above mentioned Company, the same guarantee that was tendered on behalf of the Company will be given. I have, therefore, the honour to request that the Corporation will be pleased to authorise me to enter into the necessary contract with Mr. Bingham, in modification of the arrangements previously sanctioned.

"2. I attach hereto copy of a letter from Mr. Bingham, confirming in his personal capacity his proposals on behalf of the Pioneer Company."

Letter above referred to, dated the 6th March 1901, from Mr. W. Gentry Bingham to the Municipal Commissioner :—

"With reference to my tender, dated the 14th February 1901, for the purchase and conversion of the Bombay Tramways and to the modifications which have since been provisionally arranged, and with

reference to the telegram which your Solicitors have received from their London Agent reporting that Counsel has advised to the effect that the British Pioneer Electric Light and Power Company of India cannot enter into the contract, but that the Brush Electrical Engineering Company are willing to guarantee my personal contract, I have the honour to request that the Corporation will allow my individual name to be substituted as concessionaire and promoter for that of the British Pioneer Company, the terms provisionally arranged as aforesaid holding good as though my tender had originally been on my own individual account and not on behalf of the British Pioneer Company."

Proposed by the Hon'ble Mr. Pherozeshah M. Mehta, C.I.E., seconded by Sir Bhalchandra K. Bhatawadekar, Kt. —

Resolution No. 13225, dated 11th March 1901.—

"That having regard to the fact that the Corporation have been advised by Counsel (in England) that the British Pioneer Electric Light and Power Company of India, Limited, are legally incompetent to enter into the Preliminary Agreement as to purchase of the existing Tramways, and to the fact that in order to get over this difficulty the Brush Electrical Engineering Company, Limited, have agreed to guarantee, and have guaranteed, the fulfilment of the Agreement by Mr. Bingham personally, the Corporation hereby approve and sanction the substitution in the Preliminary Agreement of the name of Mr. William Gentry Bingham in his personal capacity as the party undertaking the contract in place of the name of the British Pioneer Electric Light and Power Company of India, Limited, through their constituted attorney the said William Gentry Bingham, and the Corporation hereby authorise and direct the execution of the Preliminary Agreement on that footing.

"2. The Corporation further authorise and direct the issue and service, on the Bombay Tramway Company, Limited, of all necessary notices declaring the intention of the Corporation to exercise the power of purchase of the Tramways pursuant to Section 30 of the Bombay Tramways Act, 1874."

Amendment—Proposed by Mr. K. M. Shroff—

"That this Corporation is of opinion that the Municipal Commissioner should secure a guarantee of 50 lakhs of rupees from a proposed purchaser of the Bombay Tramway Company, or that a guarantee of an equal amount on his behalf be obtained from a local bank or from some substantial bank in England, or from some eminent bankers in England, and failing this the Bombay Tramway Company be not served with the requisite notice."

Not seconded.

The original motion was *carried* by 24 votes against 3.

Before the Corporation gave formal notice to the Tramway Company of its intention to exercise the right to purchase the undertaking, the Corporation entered into an agreement,

dated 11th March 1901, with one William Gentry Bingham (called Promoter in the said agreement) on the following among other conditions :—

1. The Corporation will pursuant to Section XXX of the Tramways Act give notice to the Tramway Company declaring its intention to purchase the present undertaking at the end of the first period of seven years after the expiration of the period of 21 years from the 12th day of March 1873 in the said section mentioned, and, subject as hereinafter provided, the Corporation and Commissioner will thereafter respectively do all things necessary for carrying into effect and completing such purchase with all convenient promptitude and despatch.

2. The said purchase shall be made in the name of the Corporation but for and on account and behalf of the Promoter by whom the whole of the respective amounts which will become payable by the Corporation to the Tramway Company in respect of such purchase whether as representing valuation of property, compensation for goodwill, premium, or compulsory sale or otherwise shall be provided and to whom the Corporation will grant the exclusive right for the period and upon the terms to be provided by the Deed hereinafter mentioned of working the said Tramways as Licensee from the Corporation and of extending and making additions to the present undertaking.

By clause 7 of the said Agreement, dated 11th March 1901, it was further provided that in the event of the Promoter duly fulfilling and discharging without default all obligations on his part under the said Agreement, the parties thereto were, after the purchase of the undertaking had been duly completed, to enter into and execute a Deed embodying *inter alia* the following provisions :—

(1) Grant by the Corporation to the Promoter of :—

(a) The exclusive right to alter existing tramways so as to convert them into tramways to be worked by electric power, and to construct new tramways in Bombay also to be worked by electric power in other public streets.

(b) The exclusive right to lay, conduct, fix, maintain and use electric cables, wires, lamps and apparatus along, over, under and upon the public streets of the City for supplying electricity for the purposes of light, heat, motive-power and industrial and other objects.

Thereafter pursuant to the Corporation's Resolution No. 12862, dated the 28th February 1901, the Bombay Tramway Company, Limited, was served with Notices on the 11th, 12th, and 13th March 1901 in terms of the Deed of Concession, dated 1st March 1873, declaring its intention of exercising its right of purchase of the undertaking.

Thereupon the Company filed a suit in the Bombay High Court against the Corporation raising *inter alia* the following issues :—

(1) Whether having regard to Section 30 of the Bombay Act I of 1874 and to the Clause 15 of the Agreement annexed to the said Act and the Notices addressed by the defendant Corporation to the Plaintiff, dated respectively the 11th, 12th, and 13th March 1901 the plaintiffs are entitled to a declaration that the defendant Corporation has failed to exercise its option of declaring its intention to purchase plaintiff's property and business at the end of the period of seven years from the expiration of the period of twenty-one years mentioned in Section 30 of the said Act and Clause 15 of the said Agreement and is not entitled to exercise such option for a period of another seven years after the 12th March 1901.

(2) Whether under the said Act and Agreement the defendant Corporation has no power to acquire the right to purchase the plaintiff's property and business save in the case of the defendant Corporation *bona fide* intending to acquire the said property and business for itself with the *bona fide* intention of carrying on and working the said business itself

(3) Whether the proposed purchase of the plaintiffs' property and business by the defendant Corporation in respect of which the said notices were given was or is a purchase by it as agent for Mr. W. G. Bingham.

(4) Whether if so the defendant Corporation has not acquired any right to purchase the said property of the plaintiffs

Protracted litigation ensued and the matter was taken up to the Privy Council, but the issue was throughout decided against the Company.

Under the Order of the High Court the ascertaining of the *bona fide* value of the property was referred to arbitration, and of the goodwill to the Commissioner.

The Arbitrators' award was as follows :—

Now Therefore we the said Edward Cecil Brindley Acworth (on behalf of the Company) and Henry Vere Rooke Kemball (on behalf of the Corporation) do hereby Award and Adjudge that the sum of Rupees Thirty-Four lakhs is at the date of this our Award the actual *bona fide* value (exclusive of any compensation for goodwill or compulsory sale or other consideration whatsoever) of the Tramways and of the works and materials connected therewith and of the lands and buildings and all other property of the Bombay Tramway Co., Ltd. And we do further Award And Declare that at the date hereof the said Bombay Tramway Co., Ltd., shall be

taken to have in their possession one thousand and eighty-four horses
 * * * * * and that each of the said one thousand and
 eighty-four horses shall be taken to be of the value of Rupees Four
 Hundred * * * * *

In Witness Whereof we have set our hands to this our Award this
 Thirty-first day of October One thousand nine hundred and two.

The question of ascertaining the amount of goodwill
 to be paid to the Company was referred by the High Court
 to the Commissioner for taking Accounts.

After protracted hearings the parties came to terms and
 a sum of Rs. 61,99,990 was fixed in respect thereof.

In calculating the amount of goodwill, Article 15 of the
 Articles of Agreement dated the 12th March 1873 between
 the Justices of the Peace for the City of Bombay of the one
 part and William French Stearns and George Alvah Kittridge
 of the other part provided that :—

* * * * * for the good-will, premium,
 compulsory sale, and other consideration of the grantees, an amount
 equal to 21 years' purchase, calculated on the average profits of the
 previous three years, 4 per cent. per annum on the *bona fide* value as
 paid being deducted from such profits.

In accordance therewith the amount of goodwill was
 arrived at as under :—

	Rs.
Arbitrators' award for the value of the property	34,00,000
Average annual profit for the previous three years from the date of giving notice	4,31,238
Deduct 4 per cent. of the value of the property	1,36,000
Annual profit for the purpose of calculating goodwill	2,95,238
Amount of goodwill : Rs. 2,95,238 × 21 years	61,99,990

At the Meeting held on the 12th January 1903, the
 Corporation considered the following Report of the Tramways
 Committee dated 31st December 1902 :—

2. The Corporation are aware that the concession given to
 Mr. William Gentry Bingham under their Resolution No. 13225, dated
 the 11th March 1901, is of a double nature, authorising him both to
 work the Bombay Tramways and to supply electric light and power in
 the City. The Corporation are also aware that delay has been caused in

giving effect to the concession by litigation which has arisen with the Bombay Tramway Company. As the Company have obtained leave to appeal to the Privy Council against the decision of the Bombay High Court, considerable further delay is likely to be caused. Meantime a pressing demand has arisen in Bombay for an electric installation for the supply of light and power, and it seemed to the Committee and the Commissioner that it was very desirable that some means should be found by which the electric light and power concession could be brought into operation at once without waiting for the Tramway concession.

3. Negotiations were accordingly opened by the Commissioner after consultation with the Committee with the Brush Electrical Engineering Co., Ltd., and certain terms have been arrived at for an agreement to enable the Brush Co. to commence the introduction and installation of electric power and lighting in Bombay without waiting for the completion of the purchase of the Tramways. These terms have been embodied in a memorandum of agreement which the Committee beg to submit herewith to the Corporation for approval.

4. It will be seen that in the event of its being finally decided that the Corporation have acquired the right of purchasing the Tramways, the present proposed agreement with the Brush Co. will, except where special exception is made, become inoperative, the previous agreement with Mr. Bingham continuing to hold good both as regards the Tramways and as regards electric light and power. The proposed new agreement will become a substantive and enduring agreement only in the event of its being finally decided that the Corporation have not acquired the right of purchasing the Tramways. The terms embodied in the memorandum have been settled with much care and deliberation, and in the Committee's opinion are very reasonable. The Committee therefore strongly recommend to the Corporation to approve of the terms, and authorise the Commissioner to enter into the proposed agreement with as little delay as possible.

MEMORANDUM for an agreement to be entered into between the Municipal Corporation and Municipal Commissioner on the one hand and The Brush Electrical Engineering Company, Limited, on the other hand with the proviso that this agreement except Schedule (1) shall wholly cease and determine if and when and so soon as it is finally held and established that the Corporation has acquired the right of purchase of the Tramways, so that the agreement, dated the 11th March 1901, between the Corporation of the 1st part, the Commissioner of the 2nd part, and William Gentry Bingham of the 3rd part can be carried fully into effect.

Recite agreement of 11th March 1901.

Recite Guarantee of Brush Company of 8th March 1901.

Recite Tramway Company's suit, and the appeals, and that delay in completion of the purchase of the Tramways and of putting into complete operation the said agreement of 11th March 1901 is occasioned by the pending litigation.

Recite that under the circumstances it has been agreed that the Brush Company and the Corporation shall enter into this agreement to enable the Brush Electrical Engineering Company, Limited, to commence the introduction and installation of Electric Lighting and Power throughout the City and Municipal Boundaries of the Island of Bombay in anticipation of and until the completion of the purchase of the Tramways by the Municipality and the putting into complete operation of the said agreement of 11th March 1901.

TERMS.

1. This agreement to be entirely without prejudice to and not to affect in any way any of the obligations and rights of W. G. Bingham, or of his Principals, or of the Brush Company as his guarantors, under the agreement of 11th March 1901, or under the said guarantee, in the event of its being finally held and established that the Corporation has acquired the right of purchase of the Tramways, in which case the agreement of 11th March 1901 shall continue to hold good in its entirety, not only as to the Tramway concession but also as to the Light and Power concession (except as hereinafter expressly provided and except in so far as necessarily varied by allowing the introduction of the Lighting and Power under this agreement in anticipation of the completion of the Tramway purchase).

2. But in the event of its being eventually finally decided that the Corporation has not acquired the right claimed in the said suit of purchase of the Tramways, this agreement to be taken to be substantive and enduring in all respects, but without prejudice in any way to any rights or claims of the parties to the said agreement of the 11th March 1901 or of the parties to the said guarantee of the 8th March 1901.

3. The Corporation, in consideration of the circumstances recited, is to execute in favour of the Brush Company or such Company to be maintained by them as shall fulfil the conditions prescribed by clause 9 of the agreement of the 11th March 1901, and be approved of by the Corporation in accordance therewith, a grant of all such rights and powers in respect of Lighting and Power as are contemplated by the schedule to the agreement of the 11th March 1901; such grant shall be upon the terms and subject in all respects to the provisions set forth in the said schedule, in so far as such terms and provisions are consistent with these presents and applicable to a present grant of rights and powers in respect of Electric Lighting and Power, and shall further be subject to the supplemental provisions as set forth in Schedule I hereto; Provided that in the event mentioned in para 2 hereof, and in that event only, the provisions of the Schedule to the agreement of the 11th March 1901, shall (without prejudice to the rights of the parties to that agreement in case that event shall not happen) be subject to the following provisions and modifications, namely:—

(a) The rate of charge for current for public lighting purposes prescribed by clause 5 (iii) of the said Schedule shall for the purposes of this agreement (and without prejudice as last aforesaid) be understood to include the lighting of the several Municipal and public buildings specified in Schedule II hereto annexed, but

shall be subject to such conditions (if any) as to revision of rates as may be prescribed by any Government License to the grantees which may for the time being be in force under the proposed new Electricity Act (a Bill for which is now under the consideration of the Imperial Legislature), or under any other law which may for the time being be in force for regulating Electrical Energy in Bombay.

(b) The provisions as to purchase (para 14 of the said Schedule) shall be so modified as to provide that the right of purchase shall be exercisable at the expiration of the period of 42 years from the date of approval of the plans to be submitted to the Commissioner, and at intervals of 10 years thereafter, and, that if and when exercised, nothing shall be paid for goodwill, but such modified provisions shall be subject to such conditions (if any) as to purchase as may be prescribed by any such Government License as in sub-clause (a) of this clause mentioned.

Proposed by the Hon'ble Mr. P. M. Mehta, C.I.E., seconded by the Hon'ble Sir Bhalchandra Krishna, Kt --

Resolution No. 11025, dated 12th January 1903

" That the Corporation, recognising the great importance in the public interests of affording every practicable facility for the introduction and establishment at the earliest possible date of an electric installation available for the supply of light and power in Bombay, hereby approve and adopt the recommendations submitted in the Report, dated the 31st December 1902, of the Committee appointed by Corporation Resolution No. 229, dated the 11th April 1901, to assist the Commissioner in all matters arising in connection with the purchase of the Tramways, and authorise the sealing, on behalf of the Corporation, of an agreement with The Brush Electrical Engineering Co., Ltd., to be prepared in accordance with the Memorandum of Agreement submitted with the said report "

* * * * *

The original proposition was then put to the vote and carried (18 votes *for* and 10 *against*).

In accordance therewith an agreement dated 23rd January 1903 was entered into between the Corporation and The Brush Electrical Engineering Co., Ltd.

The following Notice appeared in the *Times of India*, 14th April 1904 :—

**INDIAN ELECTRICITY ACT, 1903 (ACT III OF 1903).
BOMBAY LIGHTING.**

(Power to The Brush Electrical Engineering Company, Limited, to produce, store and supply Electricity, Electrical Energy and Power within the City, Town and Island of Bombay; to construct works, to lay down and erect wires and other apparatus; and to break up streets therein.)

NOTICE IS HEREBY GIVEN that application has been made to the Government of Bombay by The Brush Electrical Engineering Company, Limited, of 100-112, Belvedere Road, Lambeth, London, England, (hereinafter called "the Company") on the 13th of April 1904, under the provisions of the Indian Electricity Act, 1903, for a license for all or some of the following purposes (that is to say) :—

To authorise and empower the Company to produce, store and supply electricity, electrical energy and power as defined by the said Act for all purposes whether private or public or both within the limits of the City, Town and Island of Bombay (hereinafter called "the area of supply") and for those purposes to enter upon, break up and interfere with all streets, roads and places, ways, footpaths, railways, tramways, bridges, culverts, sewers, gas and water mains and pipes, and telegraph and pneumatic tubes and pipes, telegraph, telephone and electric wires or conduits within the said area, and to lay down, set up, maintain, renew or remove either above ground or under ground or otherwise pipes, tubes, wires, posts, apparatus or other works or things required for enabling the Company to supply, produce, store, convey, transmit, transform or distribute electrical energy and power for the several private and public purposes aforesaid within the said area, and to confer all such other powers upon the Company as may be necessary for effecting the objects of the proposed undertaking.

* * * * *

Every local authority, Company or person desirous of making any representation to the Local Government or of bringing before it any objection respecting the application, may do so by letter addressed to the Secretary to the Local Government, in the Public Works Department, Bombay, on or before the 14th day of June 1904. A copy must at the same time be sent to the undersigned.

Dated the 14th day of April 1904.

(Sd.) FRANK W. CHANTER,

*Agent for the abovenamed
Brush Electrical Engineering Co., Ltd.,
No. 1, Meadows Street, Fort,
BOMBAY.*

In this connection the following letter was addressed to Government :—

29, Esplanade Road, Fort,
Bombay, 4th June 1904.

FROM

Messrs. ARDESHIR HORMUSJI DINSHAW & Co.,
Solicitors.

TO

THE SECRETARY TO GOVERNMENT,
PUBLIC WORKS DEPARTMENT,
BOMBAY.

Sir,

We are instructed by our clients, Messrs. D. J. Tata & R. J. Tata, Executors of the late Mr. J. N. Tata, to call the attention of Government to an advertisement that has appeared in the *Times of India* of April

14th, over the signature of Mr. F. W. Chanter of the Brush Electrical Engineering Co. That advertisement specifies the terms of a license to be granted to the Company for the supply of power and light in Bombay, and invites objectors to state their objections before June 14th.

In pursuance of this advertisement, our clients wish to represent to Government that while they would welcome a license for the immediate supply of electric power and lighting within the City, they should wish the grant to be distinctly understood to comply with Section 4 (e) of the Indian Electricity Act, 1903*. Our clients do not understand that the Municipal Corporation of the City have renounced the obligation they gratuitously contracted last year to secure for the Brush Company the *exclusive* right to the supply of electric power and lighting and to discourage competition in the Brush Company's area from all other quarters.

And if that obligation has not been renounced, our clients pray that Government should treat it as invalid, in virtue of Section 4 (e) of the Indian Electricity Act of 1903, and should, if necessary, require from the Brush Company a formal release to the Corporation from such an obligation. A copy of this letter has been sent to Mr. Chanter.

(Sd.) ARDESHIR HORMUSJI DINSHAW & CO.,

Solicitors, High Court.

The recommendation of the Tramways Committee in their report dated 13th May 1904:—

" that subject to the conditions mentioned below the Corporation is to be recommended to give to the Telephone Co. a 20 years' agreement to run concurrently with the Government of India's License to the Company, *i.e.*, from 12th March 1903."

The conditions agreed to by the Company are :—

(1) That within 12 months from the receipt of written notice from the Municipal Commissioner requiring them to do so, the Company shall remove and lay underground any of their existing or future overhead wires which the Commissioner may think it advisable to have so laid.

This recommendation was approved and adopted by the Corporation at the Meeting held on 11th August 1904.

* NOTE.—Section 4 (e). The grant of a license under this part for any purpose shall not in any way hinder or restrict the grant of another license to another person within the same area of supply for a like purpose.

*Extracts from the Minutes of the Corporation Meeting held on
Thursday, the 4th May 1905.*

The Hon'ble Mr. Ibrahim Rahimtoola asked for and obtained priority to item 46 on the Agenda which was a notice of motion from him for adopting the following Twelfth Report of the Tramways Committee :—

Twelfth Report of the Committee reconstituted by Corporation Resolution No. 209, dated the 14th April 1904, to assist the Commissioner in all matters arising in connection with the purchase of the Tramways.

BOMBAY, 28th April 1905.

The Committee appointed by Corporation Resolution No. 229, dated the 11th April 1901 (and reconstituted by Corporation Resolution No. 209, dated the 14th April 1904), to assist the Commissioner in all matters arising in connection with the purchase of the Tramways and to report as occasion may require, beg to submit the following further report.

The Corporation will recollect that pursuant to their Resolution of the 11th March 1901, notice of intention to purchase the Tramway was at once given to the Tramway Company, and on the same date an agreement was entered into with Mr. W. G. Bingham whose due fulfilment of that agreement had been already guaranteed to the Corporation by the Brush Electrical Engineering Co., Ltd. In the course of the litigation with the Tramway Company which has since ensued large expenses had to be from time to time incurred by the Corporation for arbitrators' fees, experts' charges, and legal expenses, and all these Mr. Bingham had in terms of the agreement undertaken to pay from time to time on demand.

On Mr. Bingham's departure from Bombay he left a general Power of Attorney with his Solicitors who it was arranged should represent him in all matters in connection with the agreement.

On the 25th January 1904 a formal demand for payment of expenses then already incurred and brought to account, amounting to upwards of Rs. 38,000 was made on Mr. Bingham's Constituted Attorney in Bombay, and no reply to this demand having been received, the Brush Company, as his guarantors, were called upon to pay the money, which they did, together with a further sum which had by that time been disbursed.

The Brush Company have since that time taken upon themselves direct all the duties and obligations of the "Promoter" under the agreement, and are entitled to be recognised as such in place of Mr. Bingham.

In view of proposals which have now been made for a complete settlement of all outstanding disputes and questions with the Tramway

Company, the Committee deem it desirable to briefly recall to mind what has taken place in connection with the litigation already referred to which has for so long been going on between the Tramway Company and the Municipality.

As regards the earlier stages of that litigation, the Committee need only remind the Corporation that within a few days after service of notice of intention to purchase, pursuant to the Resolution of the Corporation of the 11th March 1901, a suit was filed by the Tramway Company, in the High Court against the Corporation, by which the former sought to have it declared on various grounds, that the Corporation had not acquired the right of purchase, and further sought (in case that first point should be decided in favour of the Corporation) for a declaration by the Court as to the legal position and rights of the parties in respect of various matters connected with the exercise of the right of purchase.

That suit was heard in August and judgment was delivered on the 26th September 1901, and was, on the main points, in favour of the Corporation, though, as regards certain questions of detail it was deemed necessary in the interests of the Corporation that an Appeal should be filed. The Tramway Company also appealed, and both Appeals came on for hearing late in 1901, and were disposed of by the Decree of the Appeal Court dated the 18th February 1902, under which:—the right of the Corporation to purchase in the manner proposed was confirmed; the date of purchase was declared to be the date of the award to be made as to value of property under Section 30 of the Bombay Tramways Act; and it was declared that the property to be purchased was the property of the Tramway Company which existed on the 14th March 1901, and that the Municipality were not entitled to purchase any property which the Tramway Company might acquire subsequently to that date; and lastly, it was referred to the Commissioner of the High Court to ascertain the amount of compensation to be paid for Goodwill.

The Tramway Company, as the Corporation are aware, appealed to the Privy Council against the decision of the Appellate Court in Bombay, and, in doing so, they availed themselves to the utmost of the limits of time which the law allowed them, both for the initiation and prosecution, of that Appeal, which was eventually decided in favour of the Corporation on the 3rd June 1904, the right of the Corporation to carry into effect the proposed purchase being thus finally and conclusively established.

In the meanwhile, as soon as the decision of the Appellate Court in Bombay was obtained, the Arbitration as to value of property had been pressed on and had resulted in an Award, dated 31st October 1902, fixing 34 lakhs as the amount to be paid on that account.

The date of this Award having thus fixed the date of purchase, in accordance with the Appellate Court's Decree, it became possible to proceed with the enquiry as to the amount to be paid for Goodwill on the basis of 21 years' purchase of the average annual profits of the Company for the 3 years next preceding that date.

The Company's original claim for Goodwill brought in June 1903, and based on the accounts of these 3 years, added to the 34 lakhs awarded for property amounted to an aggregate of no less than One crore and twenty-two lakhs. The examination of the Company's books which then became necessary, in order to scrutinise and combat this claim was a very laborious matter and occupied much time; thus it was not till early in 1904 that it was possible to make any progress with the evidence before the Commissioner, which involved large figures and immense detail. In the course of the enquiry which followed (up to April 1904) the Company materially modified its claims and in that month (April) the Corporation were advised that expert evidence should be taken under Commission to England on the very important question of depreciation as affecting profits, and an order for the purpose was obtained. The execution of this Commission was however delayed for some months at the request both of the Brush Electrical Engineering Co. and of the Tramway Co., who were hopeful of being able to come to terms. Eventually the negotiations between them having fallen through, the Commission was executed in November last, and immediately after its return to Bombay the inquiry was resumed, and shortly afterwards new profit statements were brought in by the Tramway Co. on the basis of which, and of the arbitration award, the total claim came to One crore and nine lakhs.

But, though the original claim has thus been substantially modified, the Tramway Co. still contend that no depreciation in respect of track, buildings, and other property ought to be taken into account in ascertaining profits for the purposes of this enquiry. The Corporation on the other hand are advised that depreciation must undoubtedly be allowed for, and that the Company's claim will thus have to be further greatly reduced, the extent of such reduction being dependent on certain important points which the Court will have to decide in connection with this question of depreciation and other matters forming the subject of surcharge and objection to the Company's profit statements.

The enquiry having been resumed in January last has since proceeded as expeditiously as possible, but the evidence has been extremely voluminous.

It was hoped at one time that it might be possible to get the matter completed and the report of the Commissioner considered by the Court before the present vacation in which case it was intended, under the advice of Mr. Arthur Cohen, K.C., to have made an application to the Court for an order for possession of the Tramway undertaking on the condition of payment of any sum admitted, and of deposit in Court (if necessary) of such further sum (if any) as might, on the Court's decision, appear to be payable, and in view to this, the Brush Co. were warned that it might be necessary for them to be prepared with the money about this time, and it was pressed on them that they should make their arrangements accordingly.

In the result it was found that the enquiry before the Commissioner occupied a longer time than was anticipated and the evidence could not be completed before the High Court and Commissioner's office closed for the present vacation.

In the meanwhile, however, Mr. C. S. Hilton, a Director of the British Electric Traction Company and of the Brush Electrical Engineering Company, and Mr. Broadhurst, the Secretary of the latter, came out to Bombay last month in connection with the arrangements made by the Brush Company as the result of the pressure which had been brought to bear on them.

The Brush Company propose immediately to register a new Company under the title of "The Bombay Electric Supply and Tramways Company, Limited", with a capital of one million sterling. A powerful Financial Syndicate has, it appears, been formed in London, by whom the provision of one million pounds for this Company (when registered) has been duly guaranteed and the Brush Company in submitting the proposed Memorandum and Articles of Association of the new Company, ask the Corporation to state that pursuant to the agreement of 11th March 1901, this Company, when duly registered, and having this sum of £1,000,000 at its disposal, will be recognised for the purpose of the agreement.

The Committee having carefully considered this matter, and having consulted the Solicitors and Counsel of the Corporation, have no hesitation in recommending the Corporation to sanction a reply being given to the Brush Company, to the effect that when the proposed new Company has been duly registered and has at its disposal the sum of £1,000,000, the Corporation will be prepared to formally recognise it under the agreement; and further, that, on the purchase from the Bombay Tramway Company of the present Tramway undertaking being duly completed, the Corporation will, pursuant to Clause 7 of the Agreement, execute in favour of the new Company, the deed therein contemplated, but on the understanding and condition, that, in the event of debentures being issued by such Company, these shall not have priority over, but shall be subject to, the very important and tangible security which the Tramway properties, and the capital sunk in new works by the new Company, will afford to the Corporation for the due fulfilment of the Company's engagements to the Municipality under the Deed.

The Brush Company have further asked, not unnaturally, that when the purchase from the Tramway Company has been duly completed, and the new Company has been duly constituted on the lines above mentioned, and has duly carried out the conversion of the undertaking to electric traction, the guarantee which the Municipality hold from the Brush Company, may be regarded as having been duly discharged. The Committee consider that, at present, it would be premature to give any positive undertaking, but, that it would be fair to inform the Brush Company, that when all the above conditions have been duly fulfilled by the new Company and when such Tramway extensions, as shall at the date of the Deed have been proposed and duly approved, have been completed, the Corporation will be prepared to favourably entertain an application by the Brush Company, to be released from their guarantee.

Finding that, contrary to expectations, there must inevitably be considerable further delay before the Corporation could hope to obtain from the Court an order for possession, and that even then there would

necessarily be grave inconvenience, and probable unavoidable dislocation of traffic by reason of the right of purchase being limited to properties (especially Stud) which were in the possession of the Tramway Company on 14th March 1901, the Brush Company's representatives (availing themselves of their visit to Bombay) entered upon negotiations with the Tramway Company in view to attempting to arrive at a figure for an early and out-and-out settlement of all claims of the Tramway Company on the lines that the new Company shall on payment of cash down, take over the entire undertaking as it stands, including all stores, horses, etc., acquired since the 14th March 1901.

As was to be expected, however, there was a wide difference between the parties to these negotiations owing to the more or less sanguine expectations on the one side and the other as to the probable figure to be determined in the event of the litigation being carried through. In the result, the Brush Company informed the Commissioner that they could not see their way to agreeing to the figure which the Tramway Company insisted on as their minimum, unless in order to make the Sinking Fund arrangements which the New Company would have to provide for, somewhat less onerous, the Corporation could see its way to make some concession in the purchase provisions to be embodied in the Deed. The suggestion at first was that the Corporation should forego the right secured to it by the agreement of 11th March 1901 of eventually purchasing the undertaking without any payment for good-will, but, while the Committee, for obvious reasons, declined to entertain the idea of making such a recommendation to the Corporation, they do nevertheless recognise the very great importance in the public interests of enabling a prompt and complete settlement to be arrived at so that further delay in the transfer of the Tramway properties and in the important work of proceeding with the conversion of traction may as far as practicable be obviated.

These considerations have influenced the Committee in further negotiations which have now resulted in a settlement being come to, subject of course to the approval and sanction of the Corporation, under which, to assist the Brush Company in coming to terms with the Tramway Company, it is proposed that the Municipality should concede something, though not, as the Committee believes, more than the circumstances fully justify.

Under the purchase provisions of the agreement as it stands the Corporation are to have the right of purchase:—

At the end of 33 years on payment of the full amount to be paid to the Tramway Company for good-will, in addition to the then value of plant and property ;

At the end of 42 years on payment of half the amount to be paid for good-will, in addition as aforesaid ;

At the end of 58 years or afterwards on six months' notice, on payment only of the then value of plant and property without anything for good-will.

The proposed modified terms on which the provisional settlement now arrived at is based, are, that the right of purchase shall be :—

At the end of 42 years on payment of 40 lakhs for good-will, in addition as aforesaid ;

At the end of 56 years on payment of 20 lakhs for good-will, in addition as aforesaid ;

At the end of 63 years and at subsequent intervals of 7 years on payment only of the then value of plant and property without anything for good-will.

The Brush Company having made their financial arrangements, are very anxious to obtain possession at the earliest possible date, so as to commence conversion work with as little delay as may be, and, the attainment of this object being a matter of so great importance to the public, this Committee, having had the advantage of personally ascertaining the views of Mr. Lowndes who has throughout advised and appeared for the Corporation in this matter, is unanimous in recommending the Corporation to accept the modified purchase terms above stated, on the condition, of course, that the purchase from the Tramway Company is completed and possession made over to the new Company within a limited time, say by 1st August next. It is understood that as a matter of fact it will be practicable to arrange for all this probably a month earlier.

In connection with the preparation of the Deed to be executed in favour of the new Company pursuant to the agreement, the Committee would point out that the passing of the Indian Electricity Act of 1903 since the agreement of 1901 was signed, will necessitate some changes in the details of the Deed to be executed pursuant to clause 7 of the Agreement. The Committee suggest that the final approval and settlement of the form of this Deed and of such minor alterations or modifications as circumstances may render necessary or proper may be left to the Commissioner in consultation with this Committee, the same being reported to the Corporation as soon thereafter as possible.

* * * * *

Proposed by the Hon'ble Mr. Ibrahim Rahimtoola, seconded by Mr. James MacDonald—

Resolution No. 586, dated the 4th May 1905—

" That the Twelfth Report, dated the 28th April 1905, of the Committee reconstituted by Corporation Resolution No. 209, dated the 14th April 1904, to assist the Commissioner in all matters arising in connection with the purchase of Tramways, is approved and adopted.

" That Mr. W. G. Bingham having failed to fulfil his obligations to the Corporation in respect of the payment of certain large sums duly demanded by him under Clause 5 of the Agreement entered into on the 11th March 1901 between the Corporation of the first part the Commissioner of the second part and the said W. G. Bingham on the third part, and the Brush Electrical Engineering Co., Ltd., as has

Guarantors having duly made those payments and taken upon themselves the duties and obligations of the "Promoter" under the said Agreement and having proposed the formation of a Company to be registered in India for the purpose of providing the moneys required for the purchase of the present Tramway undertaking and otherwise for the purpose of carrying into effect the said Agreement.

"It is resolved that when The Bombay Electric Supply and Tramways Company, Limited (which is proposed to be constituted under the Memorandum and Articles of Association submitted by the Brush Electrical Engineering Co., Ltd.), has been duly registered in Bombay and has at its disposal the sum of £1,000,000 which is stated to have been satisfactorily guaranteed in London, the Corporation will be prepared to recognise the said proposed new Company under Clause 9 of the said Agreement of the 11th March 1901.

"And further, that, on the purchase from the Bombay Tramway Co., Ltd., of the present Tramway undertaking being duly completed, the Corporation will pursuant to Clause 7 of the said Agreement, execute in favour of the said proposed new Company the Deed therein contemplated, it being understood that any Debentures proposed to be issued by the said new Company will be subject to the provisions of Clauses 10, 11, and 12 of the Schedule to the said Agreement.

"That the Corporation will be prepared to favourably entertain an application by the Brush Electrical Engineering Co., Ltd., to be released from their Guarantee, dated the 8th March 1901, when—

(a) the acquisition from the Bombay Tramway Co., Ltd., of the present Tramway undertaking has been duly completed;

(b) the proposed New Company has been duly registered in Bombay;

(c) the conversion of the present tramways to electric traction has been duly carried out by the proposed new Company; and

(d) such extensions (with electrical traction) as may, on the date of the Deed to be executed pursuant to Clause 7 of the Agreement of 11th March 1901, have been proposed by the Brush Electrical Engineering Co., Ltd. and approved by the Corporation, have been duly completed by the proposed New Company.

"That, as recommended in the Committee's Report, the Corporation hereby sanctions the embodiment in the Deed to be executed pursuant to Clause 7 of the Agreement, dated 11th March 1901, of the following provisions as to the periods at which and the terms, as regards Good-will, on which the future right of purchase of the Tramway and Electrical Supply undertakings shall be exercisable by the Corporation, in lieu of those contained in Clause 14 of the Schedule to the said Agreement:—

That the right of purchase be made exercisable at the expiration of the following periods :—

42 years, in which case 40 lakhs is to be paid for Good-will ;

56 years, in which case 20 lakhs is to be paid for Good-will ;

63 years, and periodical intervals of 7 years afterwards, in either of which cases nothing whatever is to be paid for Good-will.

" That it be left to the Commissioner in consultation with the Committee to finally approve and settle such minor alterations and modifications in the terms of the said Deed as may appear necessary or proper, reporting the same to the Corporation as soon thereafter as possible."

Carried with two dissentients.

MUNICIPAL CORPORATION MEETING HELD ON 13TH JULY 1905.

Considered—Memorandum from the Commissioner No. 8431, dated the 19th June 1905—Forwarding for information, copy of Government Resolution, General Department, No. 3186, dated the 12th June 1905.

" Letter from the Municipal Commissioner for the City of Bombay, No. 3955, dated the 9th May 1905.

I have the honour to refer you to the correspondence relating to the purchase by the Corporation, pursuant to Section 30 of the Bombay Tramways Act, 1874, of the tramway undertaking heretofore carried on by Bombay Tramway Co., Ltd.

2. Government are, I believe, aware that the completion of the purchase and the carrying out of the arrangements proposed, as reported to Government under this office No. 32961 of the 16th March 1901, have been delayed by the litigation which was instituted by the Tramway Company immediately after the notice of the intention of the Corporation to purchase was served on them in March 1901.

3. From the accompanying copy of Resolution passed by the Corporation at their meeting held on the 4th instant, and from the print (also sent) of the Report of the Committee of the Corporation referred to in that Resolution, it will be seen —

1. That the Brush Electrical Engineering Co., Ltd., (guarantors of Mr. Bingham) to whom a license for supply of electric light and power has been or is about to be granted by Government under the Indian Electricity Act, 1903, have arranged for the formation and registration of a Company to be called "The Bombay Electric Supply & Tramways Co., Ltd." for the purpose of (a) taking over the tramways and converting them to electric traction, and (b) establishing an undertaking for the supply of electric light and power in Bombay.

2. That the Corporation are prepared to recognise this new Company when duly registered and having a capital of £1,000,000 at its disposal, as the nominees of the "Promoter" for the purposes of the preliminary agreement dated 11th March 1901, copy of which was forwarded to Government on the 16th March 1901, and when the purchase of the tramway undertaking has been duly completed, to execute, in favour of that Company, the deed contemplated in clause 7 of the agreement; and

3. That negotiations which have recently been going on between the Brush Co., the Tramway Co., and the Municipality have now resulted in an arrangement being arrived at for the very early completion of the purchase of the tramway undertaking and its transfer to the new Company and for putting an end to the long pending litigation.

4. In view, therefore, of the probability that it may, at an early date, be possible to commence the conversion to electric traction of the existing tramways and the construction of extensions, I would draw the attention of Government to Section 9 of the Bombay Tramway Act, 1874, and in doing so I would respectfully submit for the consideration of Government whether the time has not now come for according sanction in general terms under this section to the introduction of electric traction in lieu of horse traction for the tramways of this City.

5. The arrangements to which I have referred contemplate a transfer of the present undertaking by the Bombay Tramway Co. at the request and by the direction of the Corporation direct to the proposed new Company, who will thus apparently (*vide* Sections 3 & 31 of the Bombay Tramways Act, 1874) as the assigns and transferees of the present Company, have sufficient authority to carry on the present undertaking and proceed with the work of conversion for the present, even if, as may perhaps be the case, it should appear necessary eventually that they should be invested with any special powers other than those which they will receive under the electric traction license to be granted to them under the Indian Electricity Act.

6. I have therefore the honour to request that pursuant to Section 9 of the Bombay Tramways Act, 1874, Government will now be pleased to accord sanction to the tramways being worked by electric traction instead of by horse power, as soon as the necessary conversion works can be completed.

7. With reference to the concluding part of paragraph 1 of Government letter No. 998, dated 18th February 1901, I think that until the proposed new Company has been registered and the purchase of the present tramway undertaking has been completed, it would be premature to apply to Government under Section 293 of the City of Bombay Municipal Act for specific sanction to the proposed new Company working the tramways.

RESOLUTION.—His Excellency the Governor in Council is pleased, under Section 9 of the Bombay Tramways Act I of 1874, to sanction the introduction of electric traction subject to the conditions of the license required under the Indian Electricity Act III of 1903

Proposed by Sir Bhalechandra Krishna, seconded by Khan Bahadur M. C. Murzban, C.I.I.—

Resolution No. 1611, dated 13th July 1905

"That copy of Government Resolution, General Department, No 3186, dated the 12th June 1905, sanctioning the introduction of electric traction subject to the conditions of the license required under the Indian Electricity Act (received with the Commissioner's Memorandum No. 8431, dated the 19th June 1905) be recorded, and a copy be forwarded for information to the Committee reconstituted by Corporation Resolution No 209, dated the 14th April 1904, to assist the Commissioner in all matters arising in connection with the purchase of the Tramways "

THIS INDENTURE made the Twenty fifth day of July One thousand nine hundred and five BETWEEN THE BRITISH PIONEER ELECTRIC LIGHT AND POWER COMPANY OF INDIA, LIMITED (hereinafter referred to as ' the Pioneer Company ') of the first part, THE BRUSH ELECTRICAL ENGINEERING COMPANY, LIMITED (hereinafter referred to as " the Brush Company ") of the second part AND THE BOMBAY ELECTRIC SUPPLY AND TRAMWAYS COMPANY LIMITED (hereinafter referred to as " the New Company ") of the third part, supplemental to an Agreement dated the Eleventh day of March One thousand nine hundred and one and made between the Municipal Corporation for the City of Bombay (therein and hereinafter referred to as ' the Corporation ') of the first part, William Leatham Harvey (therein and hereinafter referred to as " the Commissioner) of the second part and William Gentry Bingham of the third part hereinafter referred to as " the Principal Agreement ") And to an Agreement dated the eighth day of March One thousand nine hundred and one made between the Brush Company of the first part the Corporation of the second part, and the Commissioner of the third part (hereinafter referred to as " the agreement of Guarantee ") And whereas the said William Gentry Bingham is Trustee of the Concession referred to in the Principal Agreement for the Pioneer Company NOW THIS INDENTURE WITNESSETH that the said Pioneer Company Doth hereby at the request of the Brush Company Consent to the Grant to the New Company of the Concession referred to in the Principal Agreement. IN WITNESS whereof the Company's parties hereto have caused their Common Seals to be hereunto affixed the day and year first above written.

MEMORANDUM OF AGREEMENT made this Thirty-first day of July 1905 BETWEEN THE BOMBAY TRAMWAY COMPANY LIMITED (hereinafter referred to as " the Tramway Com-

pany") a Joint Stock Company incorporated under the Indian Companies Act 1862 and having its registered office at Colaba Causeway without the Fort of Bombay of the first part THE MUNICIPAL CORPORATION FOR THE CITY OF BOMBAY a Body Corporate incorporated under the City of Bombay Municipal Act 1888 (hereinafter for themselves and their successors referred to as "the Corporation") of the second part WILLIAM DIDSBURY SHEPPARD Municipal Commissioner for the City of Bombay acting in these presents for and on behalf of the Corporation (hereinafter referred to as "the Municipal Commissioner" which expression shall be understood to include every successor of his for the time being holding the office of Municipal Commissioner) of the third part THE BRUSH ELECTRICAL ENGINEERING COMPANY LIMITED a Joint Stock Company incorporated under the Companies Acts 1862 to 1900 and having its registered office at Victoria Works, Belvedere Road in the County of London (hereinafter referred to as "the Brush Company") of the fourth part AND THE BOMBAY ELECTRIC SUPPLY AND TRAMWAYS COMPANY LIMITED a Joint Stock Company incorporated under the Companies Acts 1862 to 1900 and having its registered office at Donington House Norfolk Street Strand in the City of Westminster (hereinafter referred to as "the new Company") of the fifth part * *

* * * * *

AND WHEREAS it is the express desire of the Corporation that the tramways and property of the Tramway Company should be transferred direct to the new Company NOW THEREFORE IT IS HEREBY AGREED by and between the parties hereto the parties of the 2nd and 3rd parts concurring in this Agreement for the purpose of expressing their concurrence therein so far as such concurrence is necessary but not so as to involve any personal liability in respect of any acts deeds matters or things which under this Agreement or otherwise are to be done and performed by any of the other parties hereto, as follows that is to say:—

2. *The sum payable to the Tramway Company in respect of the whole of the property to be assigned and conveyed as hereinafter mentioned shall be the sum Rs. 98½ lakhs. For the purpose of this agreement the rate of exchange shall be the sum of one shilling and four pence for every rupee or at the rate of 15 rupees to one pound sterling making the purchase price the sum of £656,666.*

3. In consideration of the payment of the aforesaid sum to the Tramway Company, the Tramway Company shall with the consent of the Brush Company hereby give assign convey and deliver and procure all necessary parties to concur in the assignment conveyance and delivery and the Corporation and the Municipal Commissioner shall confirm to the new Company all and singular the premises described in the schedules hereto and all other the real and personal moveable and immoveable property of the Tramway Company whatsoever and wheresoever.

4. The purchase shall be completed in London on the 31st day of July 1905 or as soon thereafter as is practicable when the purchase money of £656,666 shall be paid in cash and there shall be delivered to the new Company such assurances as may be reasonably required in order to vest in the new Company the said property to be assigned and conveyed as aforesaid free from incumbrances. The new Company shall be entitled to possession of the said property as from midnight on the actual date of completion.

9. This agreement is to be construed and take effect as a contract made in England and in accordance with the law of England.

No. 14761 of 1905-1906.

FROM

W. D. SHEPPARD, ESQR., I.C.S.,
MUNICIPAL COMMISSIONER
FOR THE CITY OF BOMBAY.

TO

THE MUNICIPAL SECRETARY.

MUNICIPAL COMMISSIONER'S OFFICE,
BOMBAY, 10th August 1905.

SIR,

I have the honour to report for the information of the Corporation that the purchase of the Bombay Tramways was completed in London on the 1st instant, and that the Agent of The Bombay Electric Supply & Tramways Co. Ltd. took over charge of the Tramway properties in Bombay on the morning of the 2nd instant.

I have the honour to be,
Sir,
Your most obedient servant,
(Sd.) W. D. SHEPPARD,
*Municipal Commissioner
for the City of Bombay.*

The Company thus formed began to function from 2nd August, 1905.

The principal clauses of the Deed of Concession dated the 7th August 1905 are :—

1(a). The exclusive right to alter the existing tramways so taken over from the Tramway Company as aforesaid so as to convert them into tramways to be worked by electric power and to construct new tramways in Bombay (also to be worked by electric power) in other public streets of the city but subject to such approval or permission of any municipal authority and sanction or confirmation by Government as may for the time being be required by law and also the right to open and break up roads (subject to the conditions hereinafter contained) and generally to do all works necessary or incidental to the exercise of this right Provided always and it is hereby expressly agreed and declared that in the event of the B.E.S.T. Company refusing to lay down any line which the Commissioner may consider necessary the Commissioner shall be at liberty either to hand over such line to any other person or company to construct and work or to lay down such line at municipal cost and the B.E.S.T. Company shall in such case supply the necessary electric power and work such line as part of the undertaking to be worked by the B.E.S.T. Company as hereinbefore provided subject to such terms as may in case the parties do not agree be decided by arbitration in pursuance of the provision in that behalf hereinafter contained.

1(c). All such rights as the Corporation have or shall have power to grant to lay conduct fix maintain and use electric cables wires lamps and apparatus along over under and upon the public streets of the City of Bombay for supplying electricity for the purposes of lights heat motive power and industrial and other proper objects and to open and break up roads and generally to do all works necessary or incidental to the exercise of this right the Corporation engaging that so long as the B.E.S.T. Company fulfils its obligations to the Corporation and provided it shows to the satisfaction of Government that it the B.E.S.T. Company is in a position fully and efficiently to discharge the duties and obligations to be imposed on it by any license which it may apply for from Government the Corporation will officially support the B.E.S.T. Company in such application and will take all proper steps and use their best endeavours to prevent competition in any area to which any such license may extend. Provided however that the right aforesaid is to be exercised only subject to any rules in force under Section 33 of the Indian Electricity Act, 1903, or under any other Act for the time being in force and to the terms and conditions of any such license as aforesaid (including the provisions set forth in the Schedule to the said Act) and also to any other reasonable conditions which the Corporation may from time to time deem proper to impose by by-law or otherwise for the convenience or safety of the public.

9. The B.E.S.T. Company shall at its own expense at all times maintain and keep in good condition and repair in such manner as the Commissioner shall direct and to his satisfaction so much of any road whereon any tramway belonging to it is laid as lies between the rails of the tramway and (where two tramways are laid by the B.E.S.T. Company in any road at a distance of not more than six feet from each other), the portion of the road between the tramways and

in every case so much of the road as extends 18 inches *beyond the* rails of and on each side of any such tramway. And in consideration of such maintenance of parts of roads and of the yearly rent hereinafter reserved to be paid by the B.E.S.T. Company to the Corporation the B.E.S.T. Company shall be exempt from the tax on vehicles and animals leviable under the Municipal Act in respect of its horses carriages and other vehicles kept within the city but shall not be exempt from property taxes or charges for water or other charges for services (if any) or for town duties (if any) leviable by the Municipality under the Municipal Act.

15. The B.E.S.T. Company shall have authority —

(a) To take tolls fares and charges for the use of the tramway at rates to be fixed subject to the approval of the Corporation and in so far as regards passenger traffic over the lines comprised in the now existing tramways the fare shall (subject as hereinafter provided) be at a uniform rate of one anna from any one point to any other point. Provided however that the B.E.S.T. Company shall be at liberty with the approval and sanction of the Corporation to institute a tramway service for the conduct of passenger traffic over the whole or any part of its system in two classes and to charge special fares to be fixed with the sanction of the Corporation for the conveyance of first class passengers :—

(b) to charge (subject to the provisions of the License under the Indian Electricity Act, 1903) for supplying electric current for lighting and power purposes at the following rates namely :—

- (i) maximum rate eight annas per Board of Trade unit for electricity for all purposes with a minimum charge of Rs. 20 per quarter ;
- (ii) for private lighting purposes six annas per Board of Trade unit ;
- (iii) for public lighting purposes three annas per Board of Trade unit ; and
- (iv) for power purposes three annas per Board of Trade unit.

16. The Corporation shall be entitled to require the B.E.S.T. Company to make and carry out special arrangements (consistently with the exigencies of general traffic) for affording tramway service over the tramway lines for any municipal purposes (not therein including removal of sewage) to be determined by the Commissioner, at special rates to be fixed on the general basis of payment of cost of supplying the necessary motive power plus an addition for wear and tear of plant machinery and rolling-stock and for services of the staff of the B.E.S.T. Company and for reasonable profits such rates in case the parties do not agree to be determined by arbitration under the provision in that behalf hereinafter contained provided that any special rolling-stock required for such special service shall be supplied by or at the expense of the Corporation.

18(a). To strictly abide by and observe all the provisions and conditions aforesaid and also all the provisions and conditions of any license or licenses under the Indian Electricity Act, 1903, under which it may for the time being be authorised to supply electric current in Bombay either for tramway traction or for general lighting and power purposes and all regulations or by-laws for the time being in force as aforesaid.

18(d). Not to assign underlet charge or encumber without the previous consent in writing of the Commissioner the rights which the B.E.S.T. Company is entitled to exercise under these presents or any part of the properties purchased from the Tramway Company as aforesaid or otherwise acquired or to be acquired or constructed or to be constructed for the purpose of the tramway undertaking or of the electric supply undertaking (both of which undertakings and all of which rights and properties are hereinafter collectively referred to as "the combined undertaking"). Provided that no such consent shall be required in respect of the issue by the B.E.S.T. Company of any mortgage debentures, mortgage debentures stock, or preference shares or in respect of any dealing by the B.E.S.T. Company with any rolling-stock, plant, horses, chattels and other moveable property not required for the efficient working of the combined undertaking but any such debentures, debenture stock or preference shares (if issued) shall be deemed to be subject in all respects to these presents.

18(j). To pay to the Corporation in respect of the existing tramways a yearly rent at the rate of Rs. 3,000 per mile of double track and Rs. 2,000 per mile of single track payable half-yearly; such rent shall accrue due from the date on which the B.E.S.T. Company obtained possession of the existing tramways as aforesaid; Provided always and it is hereby agreed that no sidings turn-outs or tracks necessary to connect the traffic lines with the stables carriage sheds factories or other property or properties of the B.E.S.T. Company shall be included in the mileage on which such rent is to be paid but that such sidings turn-outs and necessary connecting tracks shall be free of rent.

18(k). To pay to the Corporation in respect of any extensions and additions to the existing tramways and any new lines to be hereafter laid yearly rent at rates 50 per cent. lower than those payable in respect of the existing tramways such additional rates to accrue from the respective dates on which such extensions, additions, or new lines shall be opened for public traffic, and shall be paid at the times and calculated in the manner provided in the last preceding sub-clause.

18(l). To keep and maintain in good order and condition throughout the term hereby granted the whole of the lands, buildings, premises, plant, machinery, apparatus and cars used about or upon or in connection with the combined undertaking and if at any time during the said term the plant, machinery, apparatus or cars or any part or parts thereof become obsolete or inadequate for the proper or efficient working of any part of the combined undertaking to replace the same or any part thereof at the cost of the B.E.S.T. Company and in so doing to have due regard to any improvements in such plant, machinery, apparatus and cars that may at the time be in general use on similar undertakings

in England and to introduce and adopt any improvements which may be conveniently introduced and adopted or which in case of difference or dispute the B.E.S.T. Company may be directed to introduce and adopt by any award or order which may be made in that behalf under the arbitration clause hereinafter provided.

24. The Corporation shall have the right at the times, and on the terms and conditions hereinafter mentioned to purchase the combined undertaking with all lands, buildings, installations, plant, machinery, rails, rolling-stock, mains, apparatus, stores and property of every description belonging to the B.E.S.T. Company or held for the purposes of or in connection with the combined undertaking or any part thereof. The said right of purchase shall be exercisable at the expiration of either of the respective period of 42 years, 56 years and 63 years from the date of these presents and at the end of every seven years after the expiration of the said last-mentioned period of 63 years. Provided always that notice of intention to exercise the right of purchase aforesaid shall be given by the Corporation to the B.E.S.T. Company not less than six calendar months before the expiration of the particular period at the end of which the right of purchase is sought to be exercised, the B.E.S.T. Company shall not increase the plant and rolling-stock of the combined undertaking or any part thereof abnormally during the last two years next preceding the accrual of the right of purchase at either of the periods aforesaid. The amounts to be paid in the event of such purchase as aforesaid shall be the then *bona fide* value (exclusive of any compensation for good-will premium or compulsory sale or other consideration whatsoever) of the property comprised in the combined undertaking regard being had to the purposes to which it has been and is adapted for being used, such value in case the parties do not agree to be decided by arbitration under the clause in that behalf hereinafter provided and as compensation for the good-will premium or compulsory sale and other consideration the B.E.S.T. Company shall be paid as follows :—

(a) If the right of purchase shall be exercised at the expiration of 42 years from the date hereof the Corporation shall pay to the B.E.S.T. Company (in addition to the value of the property as aforesaid) the sum of Rs. 40 lakhs only without any interest or other increment.

(b) If the right of purchase shall be exercised at the expiration of 56 years from the date hereof the Corporation shall pay to the B.E.S.T. Company (in addition to the value of the property as aforesaid) the sum of Rs. 20 lakhs only without any interest or increment.

(c) If the right of purchase shall be exercised at the end of 63 years from the date hereof or at the end of any subsequent period of seven years the Corporation shall pay to the B.E.S.T. Company the value of the property as aforesaid only and shall not be liable for any compensation whatsoever for good-will premium compulsory sale or other consideration.

Complete possession of the property comprised in the combined undertaking shall be given to the Corporation on the expiration of the period at the end of which the right of purchase may be exercised.

The amount of purchase money so payable as aforesaid together with such compensation (if any) as shall be payable for good-will shall not be paid until after possession has been given as aforesaid ; Provided that if the purchase money shall not be paid on possession having been given the question whether any and what interest shall be payable to the B.E.S.T. Company shall be determined under the arbitration clause hereinafter contained. The B.E.S.T. Company shall be under obligation to carry on the working of the combined undertaking to the satisfaction of the Commissioner during the interval between the delivery of notice to the B.E.S.T. Company as aforesaid and the date of handing over possession so that the combined undertaking may be handed over to the Corporation as a going concern in working order and in good condition and that there shall be no interruption to the tramway service and the supply of electricity. In default of the B.E.S.T. Company complying with the last-mentioned obligation the Commissioner shall have the right anything hereinbefore contained to the contrary notwithstanding immediately to enter upon and take possession of the combined undertaking in the name of the Corporation and cause it to be carried on in anticipation of the ascertainment and payment of the purchase money as hereinbefore provided and in such case the whole of the said sum of Rs. 15,000 so deposited as aforesaid shall be forfeited to the Corporation.

25. If any doubt, difference or dispute shall arise between the Corporation and the B.E.S.T. Company touching the construction of these presents or anything herein contained or touching or concerning any other matter or thing relating to these presents, then, and in every such case such doubt, difference or dispute shall be referred to the arbitration of two independent persons (hereinafter called " the Arbitrators ") one to be chosen by the Corporation and the other by the B.E.S.T. Company from time to time as occasion shall arise within one calendar month after either of them shall have made to the other a requisition to that effect and in case the arbitrators shall not agree, to the umpirage of such independent person as the arbitrators shall by writing under their hands before they enter upon the consideration of the matters referred nominate and appoint and every such reference and arbitration shall be deemed to be a reference and arbitration under and subject to the provisions of the Indian Arbitration Act, 1899 or any *subsisting statutory modification or re-enactment thereof.*

26. *The B.E.S.T. Company shall not be liable for breach of any covenant agreement or stipulation herein contained which may inevitably be caused by reason of any strike, or combination of workmen, or any riot, or commotion, or, by the outbreak of hostilities of war, the act of God, or unavoidable accident or any other circumstance beyond the control of the B.E.S.T. Company (exclusive of the want of fund) and no such breach shall be deemed a default on the part of the B.E.S.T. Company.*

CHAPTER 2.

Evolution of The Bombay Electric Supply & Tramways Co., Ltd.

We have seen in the first Chapter that the Municipal Corporation before giving notice, on the 12th March, 1901, to The Bombay Tramway Co., Ltd., of its intention to exercise the right of purchase of the undertaking in accordance with the terms of the Deed of Concession, dated the 12th March 1873, entered into an agreement with Mr. William Gentry Bingham on the 11th March, 1901, whereby he covenanted to purchase and take over the existing undertaking, to work the Tramways in future under license from the Corporation and to substitute for the horse traction a system of electric traction throughout, a security to the Corporation for the due fulfilment and carrying out of the agreement being given by the Brush Electrical Engineering Co., Ltd., London, on the 8th March 1901.

This concession was in fact entered into by Mr. Bingham as Trustee for and on behalf of the British Pioneer Electric Light and Power Company of India Limited and by a Deed Poll dated the 6th April, 1901, Mr. Bingham irrevocably appointed the Pioneer Company as his attorneys to act for him and in his name in all matters in connection with the said Concession.

It was at the request of the Pioneer Company that the Brush Electrical Engineering Co., Ltd., guaranteed to the Municipality the due performance and carrying out the Concession. The Brush Company were thus interested in the business undertaken by Mr. Bingham on behalf of the Pioneer Company. On 22nd January, 1902, both these Companies entered into an agreement jointly to form a Company to be registered in Bombay in accordance with the Concession, under the Indian Companies Act, 1862, having the following objects :—

- (a) The acquisition of the undertaking of the Bombay Tramways Co., Ltd.
- (b) The institution of a system of electric traction in substitution of the existing horse traction.

- (c) The construction and maintenance of new lines of tramways.
- (d) The adoption of the agreement of 11th March, 1901, and the acceptance of the terms and conditions of the fresh Deed of Concession as provided therein, and
- (e) The installation in the City of the necessary plant and machinery for supply of electricity.

The Pioneer Company agreed to sell the Concession to the intended new Company at the price of £65,000 or such lesser sum as was to be determined by arbitration, a separate agreement having been entered into by the Pioneer and the Brush Companies on the same date, *viz.*, 22nd January, 1902, for the purpose of referring the matter to the decision of Sir Douglas Fox, whom failing to Mr. J. Kincaid.

It was also agreed to allow Messrs. Rowell Stuart Kelman & Co., Ltd., to whom the contract for the work to be executed under the Concession (other than the one relating to Rolling-stock, including car bodies and trucks, car, motor equipments and appurtenances, steam engines, electric generators, motor switch-boards, sub-station electric apparatus, wiring fixtures, lamps, fittings, which was to be furnished by the Brush Co.) was granted, to assign the benefit of it to Messrs. J. G. White & Co., Ltd., of 22A, College Hill, Cannon Street, E.C., London.

Great delay was however caused in completion of the purchase of the Tramways and in putting into complete operation the agreement of 11th March, 1901, owing to the Tramway Company's suit and the appeals. It was, therefore, by a *Memorandum*, dated the 29th December, 1902, agreed between *the Municipality and the Brush Electrical Engineering Co., Ltd.*, that the latter Company should commence the introduction and installation of Electric Lighting and Power in and throughout the City in anticipation of and until the completion of the purchase of the Tramways by the Municipality; and in the event of its being finally held and established that the Corporation had acquired the right of purchase of Tramways, the agreement of 11th March, 1901, would hold good in its entirety, both as regards the Tramway Concession and the Light and Power Concession.

The Brush Company thereafter on 21st September, 1903, agreed to pay to the British Electric Traction Company, Ltd., a certain sum plus one-third of any profits which the Brush Company might make out of the promotion of the new Company in consideration of the assistance rendered and to be rendered to them by the British Electric Traction Co., Ltd.

The consideration payable to the Pioneer Company for their interest in the Concession was by a subsequent agreement, dated the 31st December, 1903, between the Pioneer Company and the Brush Company reduced to £ 30,000, out of which £12,500 were in respect of Electric Lighting portion of the Concession and £17,500 in respect of Tramway portion. It was also agreed that the Brush Company was free to take over and work the Concession on payment of the above sum to the Pioneer Co.

On 17th April, 1905, a fresh agreement was entered into between the Brush Electrical Engineering Co., Ltd., and the British Electric Traction Co., Ltd., rescinding thereby the agreement of 21st September, 1903, and providing for the following provisions :—

- (1) The British Electric Traction Co., Ltd., to take over the obligations and liabilities of the Brush Co. under the Concession and in due course to take steps for the formation and capitalisation of a new Company with adequate capital ;
- (2) To pay the expenditure of the Brush Co. ;
- (3) To pay £20,000 in cash to the Brush Co. when the purchase of the Bombay Tramway Co. was completed ; and
- (4) The Brush Co. to have a contract for the supply of rolling stock and equipment for the tramway and plant, etc., for electric light and power at fair competitive prices, and for the supply and erection of mains, buildings and plant, etc., etc.

On the 27th June, 1905, The Bombay Electric Supply and Tramways Company, Limited, was incorporated in London under the English Companies Act. It was registered in Bombay on the 22nd July, 1905, under the provisions of the Indian Companies Act, 1882.

The British Electric Traction Co., Ltd., by an agreement dated the 3rd July, 1905, transferred to The Bombay Electric Supply & Tramways Co., Ltd., the Concession including the Electric License, dated the 7th June, 1905, obtained by the Brush Co. and all works already executed at the price of £950,000. This amount was made up as follows :—

(a)	Cost of purchase of the Horse Lines, namely 98½ lakhs of rupees at 1s. 4d per rupee	£ 6,56,666
(b)	Apportionable amounts payable on completion in addition to the abovenamed purchase money, estimated at	£ 500
(c)	Cost of the Municipality payable by us in obtaining possession of Tramways, including arbitration, law costs, etc.	£ 20,000
(d)	Cost of obtaining the Electric Lighting Order and Electric Traction Order, and any Act necessary to confirm, estimated at	£ 1,000
(e)	B.E.T. out of pocket expenses, including Mr. Hilton's and Mr. Broadhurst's expenses to Bombay and to Mr. Lattle, and Engineering work to date of taking over	£ 3,500
(f)	Cost of registration of Bombay Company including Mr. Morse's legal costs, printing articles, etc., estimated at	£ 5,000
(g)	Works under Schedule A with the Brush Company	£ 80,000
(h)	Payment to Pioneer Co. of India under agreement	£ 30,850
(i)	Estimated cost of obtaining Transfers of Mr. Bingham's interest	£ 1,000
(j)	Payment to Brush Company for transfer	£ 20,000
(k)	Interest on payments made by B.E.T. from date to completion	£ 500

NOTE.—In addition, the B. E. T. Co. is entitled to the actual cost of reconstruction of the Tramways and further work for Electric Lighting plus a percentage to be agreed for standing charges. The new Company will appoint and pay its own Engineers.

Carried over .. £ 8,19,016

Brought over . . . £ 8,19,016

NOTE.—The agreement will provide that the new Company will take all revenue from the working of the Electric Lighting Station and will pay the B.E.T. in addition to the above, all charges against revenue

(j) Deposits made by Brush to be transferred to new Company . . .	£ 2,400
(m) Stamp duties say 10s per cent upon 34 lakhs . . .	£ 1,500
	£ 8,22,916
Add—B. E. T. profit . . .	£ 1,25,000
Say £ 9,50,000 as in Clause 2 of agreement . . .	£ 9,47,916

The B. E. S. & T. Co., Ltd., agreed to satisfy the above sum as follows :—

£ 2,25,000 in cash.

£ 6,00,000 by the issue and allotment by the Bombay Company to the B.E.T. Company or its nominee of that amount of 4½ per cent. first mortgage debenture stock of the Bombay Company credited as fully paid up and bearing interest from the date on which the Bombay Company shall be placed in possession or receipt of the revenues or profits of the present tramway system the subject of paragraph (1) of clause 1 such debenture stock to be secured by Trust Deed in such form as the B.E.T. Company may reasonably require

£ 1,25,000 by the issue and allotment by the Bombay Company to the B.E.T. Company or its nominees of 12,500 Ordinary Shares of £ 10 each Nos. 60,001 to 72,500 both inclusive of the Bombay Company credited as fully paid up.

£ 9,50,000

The grant of the Concession, dated the 11th March, 1901, thus made by the British Electric Traction Co., Ltd., to the B. E. S. & T. Co., Ltd., was assented to by the Pioneer Electric Light & Power Co., Ltd., at the request of the Brush Co., by an agreement entered into between them on the 25th July, 1905.

A final agreement was then entered into on the 31st July, 1905, between the Bombay Tramway Co., Ltd., the Bombay Municipality, the Brush Company and the B. E. S. & T. Co.,

Ltd., whereby all the moveable and immoveable property of the Bombay Tramway Co., Ltd., were assigned by them to, and purchased by the B. E. S. & T. Co., Ltd., on payment by the latter of a sum of Rs. 98½ lakhs which was calculated as follows :—

—	Original cost of old Company	Prices as taken over	Prices realised and retained	Loss to New Company	
	Rs.	Rs.	Rs.	Rs.	
Horse Cars ..	1,95,502	1,66,170	10,343	1,55,827	
Horses ..	6,48,619	5,43,200	2,18,778	3,24,422	
Bullock Carts ..	521	400	154	246	
Bullocks ..	866	400	180	220	
Land ..	3,34,667	8,56,340	8,56,340	..	
Buildings ..	9,82,605	8,37,490	5,30,556	3,06,934	
Permanent Way	12,80,038	10,88,000	1,68,405	9,19,595	
Road Pumps ..	241	200	..	200	
Equipments ..	1,46,430	71,600	48,910	22,690	
Stock in Store-keeper's Ledger ..	1,18,324	86,200	86,200	..	
Total Tangible Assets ..	37,07,813	36,50,000	19,19,866	17,30,134	Adjusted in 1920
Good-will (Intangible) ..	..	61,99,990	40,00,000	21,99,990	In 1920
Total Rs. ..	..	98,49,990	59,19,866	39,30,124	

The purchase was completed in London on the 1st August, 1905, and in accordance with the terms of the above agreement the B. E. S. & T. Co., Ltd., took charge of the concern on, and began to function from the morning of the 2nd August, 1905.

The Deed of Concession was thereafter granted by the Municipality on the 7th August, 1905, and the following Prospectus was issued by The B. E. S. & T. Co., Ltd., on the 8th August, 1905 :—

PROPERTY TO BE ACQUIRED.

The Bombay Electric Supply and Tramways Company, Limited, was incorporated under the English Companies' Acts on the 27th June, 1905, and has since been registered in Bombay under the Indian Companies' Act.

The Company has entered into an Agreement, dated 3rd July, 1905, with the British Electric Traction Company, Limited, of Donington House, Norfolk Street, Strand, London, under which the Company acquires as on and from the 2nd August, 1905, the horse tramways in Bombay, with the horses, cars, plant, freehold and leasehold property held therewith together with a Power House containing about 1,000 h.p. of plant with capacity for 4,400 h.p. more. The Company has also obtained the grant by the Municipality of a concession to convert the tramways to Electric Traction ; to construct new tramways and also the grant of all such rights as the Municipality has or shall have power to grant, to lay electric cables for the supply of electricity for lighting power and other purposes. Subject to the right of the Municipal Commissioner of Bombay to determine the concession on the happening of the events therein mentioned, the concession is in perpetuity, save that the Municipality has the right to purchase the undertaking at the end of 42 years, 56 years or 63 years or at the end of any subsequent period of seven years on the following terms :-

CONCESSION, TENURE AND TERMS.

The amount to be paid by the Municipality to the Company is the then *bona fide* value (exclusive of any compensation for goodwill, premium, or compulsory sale or other consideration whatsoever) of the property, regard being had to the purposes to which it has been and is adapted such value in case of difference to be decided by arbitration with an addition in the event of purchase at the end of 42 years of 40,00,000 rupees for goodwill, or in the event of purchase at the expiration of 56 years the then *bona fide* value of the property as aforesaid with an addition of 20,00,000 rupees for goodwill. If the right of purchase is exercised at the end of 63 years, or at the end of any subsequent period of seven years, the Municipality is to pay the Company the *bona fide* value of the property as aforesaid only without any allowance for goodwill. The Directors propose to create a sinking fund for the further protection of the shareholders in the contingency of a Municipal purchase.

The Concession provides that the Company shall pay the Corporation (a) in respect of the existing tramways a yearly rent at the rate of 3,000 rupees per mile of double track and 2,000 rupees per mile of single track ; (b) in respect of any extensions and additions to the existing tramways and any new

lines to be hereafter laid, a yearly rent at the rate of 50 per cent. lower than that payable in respect of the existing tramways.

EARNINGS AND NET PROFITS OF EXISTING TRAMWAYS.

The existing horse tramways are of about $17\frac{1}{2}$ route miles and the annual traffic receipts have been :—

For 1901	..	£	88,481.
For 1902	..	£	92,556.
For 1903	..	£	95,615.
For 1904	..	£	100,501.

The net profit of the horse tramways for the year ended 11th March, 1905, after deducting all operating and maintenance expenses and depreciation, amounted to £ 41,500, and would have been larger had not capital expenditure been restricted by reason of pending question as to purchase of the undertaking.

The present net profits from horse tramways alone, are therefore more than sufficient to pay the interest on the whole of the Debenture Stock ; and the conversion of the *tramways to electric traction, the construction of proposed extensions, and the sale of electricity for light and power, must materially increase the revenue.*

All the disadvantages of horse traction are greatly intensified in the tropical climate of Bombay, and the advantages resulting from electrification will, therefore, be correspondingly greater. As a result of the substitution of electricity for horse traction on the Calcutta Tramways and of extending the tramways about 4 miles, the gross traffic receipts increased from £ 72,000 in 1901 to £ 128,000 in 1904.

As will be seen by the accompanying map the Power House is well situated both for working the tramways and for supplying electricity for light and power.

The City of Bombay is, owing to its geographical position, the most favourably situated port of India for trade with Europe, Africa and the nearer East. It is also the principal manufacturing city of India, and the entire East, its cotton mills alone being about 84 in number. Its trade is steadily advancing, and its magnificent docks are in course of being further extended. The population of the city is about 800,000.

The Government has recently constituted a Board, known as the Bombay Improvement Trust, for the improvement and extension of the city. Several wide streets through the most densely populated districts are now in course of construction, and some of these, when completed, should be valuable tramway routes. Extensions to the outlying districts will be desirable and are being considered.

There is a wealthy residential population in Bombay, and the demand for electricity for lighting is expected to be considerable. There is also large scope for the employment of electrical power for industrial purposes, for the driving of fans, and in connection with illuminations customary on the occasion of native festivals.

PURCHASE PRICE AND CAPITAL EXPENDITURE.

The consideration or price payable to the British Electric Traction Company, Limited, who are the promoters, is £ 950,000, payable as to £ 225,000 in cash, as to £ 600,000 by the allotment of that amount of 4½ per cent. Debenture Stock; and as to £ 125,000 by the allotment of 12,500 fully paid Ordinary Shares of £ 10 each. This price includes the completion of certain specified works and buildings in connection with the supply of electricity, and all the costs in connection with the formation and registration of the Company in England and in India. The portion of the purchase price which is paid in cash and Debenture Stock represents the actual expenditure of the British Electric Traction Company, Limited, in the acquisition of the horse tramways amounting to £ 656,666. 13. 4 (being the amount of the purchase money paid to The Bombay Tramway Company, Limited); payments made or to be made for the electrical works carried out or in progress, amounting to £ 80,000; and actual disbursements amounting to £ 71,294 consisting of the sum of £ 30,000 and £ 20,000 payable under Contracts 7 and 8 mentioned below, costs and other expenses; also estimated further disbursements in the acquisition of the Concession and License in legal and arbitration proceedings under certain of the Agreements hereinafter set out, and in the registration and formation of the Company amounting to £ 17,039. 6. 8. The remainder of the purchase price, amounting to £ 125,000 payable in Ordinary Shares, has been added by the British Electric Traction Company in respect of its profit upon re-sale to this

Company. This profit will be increased or diminished in the event of the above mentioned further disbursements being less or more than the estimate

The British Electric Traction Company agrees to carry out further works for the supply of electricity ; to convert the existing tramways for electric traction and to construct certain extensions ; all at the actual net cost to the British Electric Traction Company, with a reasonable addition only *in respect of standing charges, such addition in case of difference to be settled by Arbitration. These works are estimated to cost about £ 550,000, of this amount £ 375,000 will be provided out of the present issue and the remainder when required by the issue of Ordinary Shares or otherwise as the Directors may determine.*

Under the provisions of the Bombay Tramways Act, 1874, under which the Bombay Tramway Company, Limited, held their concession, the price payable to them on purchase by the Municipal Corporation of the City of Bombay was to be the *bona fide* value of the property of the grantees, together with compensation for goodwill, premium or compulsory sale, and other consideration. The purchase price payable to the Bombay Tramway Company, Limited, was agreed at the sum of £656,666. 13. 4 by the agreement of the 31st July, 1905, hereinafter mentioned. Of this agreed price it is estimated that £ 300,000 may be considered as payable for good-will.

The amounts of the preliminary expenses (included in the purchase price) is estimated at £ 5,000 which includes £ 3,120 fees paid on the registration of the Company here and in India.

UNDERTAKING.

The Electric and General Investment Company, Limited, have purchased from the British Electric Traction Company the above mentioned £ 600,000 Debenture Stock, at par, and offer the Stocks for sale. They have also, in consideration of the allotment of 14,500 fully paid Ordinary Shares, underwritten the whole of the 60,000 Preference Shares now offered, and have undertaken the whole cost of the issue, advertising, etc. The British Electric Traction Company are interested in these contracts to the extent of 45.516 per cent.

The Bombay Electric License, dated the 7th June, 1905, which was granted to the Brush Company was assigned by them to The B. E. S. & T. Co., Ltd., on the 16th October, 1905.

The Electric General & Investment Co., Ltd., offered for sale at par £ 600,000 4½% Debenture Stock which they had purchased from the Company on the 4th August, 1905. They also offered on behalf of the Company for subscription at par 60,000-6% Cumulative Preference Shares at £ 10 each. The Debentures were to be redeemable at 105 per cent. in the event of the voluntary liquidation or at the option of the Company, upon six months' notice to be given at any time after the 1st July, 1925. The Preference Shares were intended to rank in priority to the Ordinary Shares in respect of Capital.

Subscription List for the issue of £ 150,000-5% Second Mortgage Debentures (payable to bearer) at 94½ per cent. was opened in London and Bombay on the 1st June, 1909. These were redeemable by 25 annual drawings at 101 per cent. The first drawing took place on 1st June, 1913. The whole loan was to be redeemed by July 1937.

The interest on both the above Debentures of 1905 and 1909 was to be paid half-yearly on 1st January and 1st July.

REGISTRATION OF THE COMPANY

As required by Clause 9 of the Concession, dated the 11th March, 1901, granted by the Municipal Corporation to Mr. W. G. Bingham and in view of the fact that The B. E. S. & T. Co., Ltd., was in the Deed of Concession of 7th August, 1905, described as a Company registered in Bombay under the Indian Companies Act, 1882, the Company was registered at Bombay on the 22nd June, 1905, by mistake under Part I of the Indian Companies Act instead of under Part VII. It was afterwards discovered that the registration thus effected had operated legally to call into existence a *second* Company bearing precisely the same name as, but not being identical with, the Company of that name incorporated in England; and that as the Indian Company had no material and was only a dummy Company, the English Company would have been forced to submit all statutory returns to the Registrar under Part VII. This the then Board in London were unwilling to do. The Directors on the contrary wanted to have

the Indian Company struck off the Bombay Register, and in lieu thereof, offered to undertake to furnish to the Municipality the Company's Accounts and to make whatever arrangement was necessary to enable the Corporation to sue the Company in Bombay. The Company made strenuous efforts to bring the Corporation round to their view, but to no purpose. The Corporation on the 7th March, 1910, under the leadership of Sir Pherozechah M. Mehta, called upon the Company to register in Bombay without further delay.

The Indian phantom Company was, while the above negotiations were carried on, by a Resolution of the Board in March 1907, wound up voluntarily with Mr. Rimington as Liquidator, and it ceased to exist on the 15th December, 1910.

The English Company was then registered under Part VII of the Indian Companies Act, 1882, on the 16th August, 1910.

CHAPTER 3.

Consultative Committee.

The London Secretary, in reply to the letters addressed to him by the Managing Director, Mr. F. C. Rimington, in connection with the formation of an Advisory Board in Bombay, wrote to the latter on the 16th December 1908 as follows :—

ADVISORY COMMITTEE

The Board have carefully considered the views expressed in your confidential letter addressed to me on the above subject, dated 20th of November, and your further letter No 787 of the 28th of November which I submitted to the Directors at their meeting yesterday.

The Directors agree with the views expressed in your letter that a Committee constituted in the manner suggested would render valuable services by giving the Board of Directors the benefit of their advice on local matters, and the Committee would also be the means of dissipating any erroneous ideas that may be prevalent in regard to the financial position of the Company such as have been current during the last few months. The Directors, however, think that it would be advisable that the Committee should be constituted under the title of

"CONSULTATIVE COMMITTEE".

That it should consist of the Managing Director or Manager of the Company in Bombay, who should be *ex officio* Chairman as you suggested, two members of the Syndicate* and one European who should be selected as being representative of the commercial community. In regard to the selection of the latter, the Board would be glad to hear who you suggest should be asked to join the Committee. The Directors also are of opinion that any member of the Board who may happen to be in Bombay should be *ex officio* a member of the Committee; that the qualification of the members of the Committee should be that they must be shareholders or stockholders in the Company.

You will see that we have suggested that two members of the Syndicate should be on the Committee instead of three as suggested by you. Our only object in making this suggestion is that if we have three members of the Syndicate and, say, two Europeans and the Managing Director of the Company in Bombay, the Committee would assume cumbersome and unwieldy proportions, which is undesirable.

As regards the question of remuneration, we note that Sir Sassoon David suggests that the members should receive Rs. 50 each in respect of each meeting. We were inclined to think that Rs. 30 was hardly

* A Syndicate consisting of Sir Sassoon David, Messrs Tullockchand and Shapoorjee, Mr Motichand Devchand and Mr Dwarkadas Dharamsey was formed in Bombay in 1907 to underwrite 25,643 Ordinary Shares of the Company.

sufficient. The Directors' view is that under normal circumstances a meeting once a month should suffice and that the remuneration should be fixed at a monthly fee of Rs. 50 per member exclusive of the officers of the Company who might be on the Committee.

As regards the powers of the Committee the Directors are unanimously of opinion that these should be essentially of a consultative character. That Mr. Cooper should not be subject to their instructions and that in any matters upon which Mr. Cooper and the Committee might disagree and on all matters of principle, the views of the Committee shall be submitted to the London Board for consideration and instructions before being given effect to. If the Committee is constituted with this broad definition of the scope of its powers it will not, we think, be necessary to define precisely what subject should come within its province, as would otherwise have been desirable.

As soon as we hear from you the name of the European member you suggest and which members of the Syndicate should go on the Committee, the Board will pass the resolutions necessary to constitute the Committee in accordance with the powers conferred upon them under Article 87 of the Articles of Association.

Mr. Rimington's reply dated the 15th January 1909 was as follows :-

I am favoured with your letter No. 900 of 16th ultimo, regarding this matter, and I note the views of the Board conveyed therein. I am quite in accord with the Directors that the functions of the Committee should be purely consultative, and any recommendation it may make on matters of importance be subject to the consideration and instructions of the London Board. *I anticipate no difficulty in restricting its duties to such consultative and in no way executive action.*

Since receipt of your letter I have seen Mr Shapurji and informed him that the Board approves of the formation of a Committee on these lines. I explained to him the preference you express that the Board should consist of 2 members of the Syndicate only and 1 European shareholder with the chief executive Officer of the Company in Bombay for the time being as ex-officio Chairman. He does not press for a 3rd member of the Syndicate being appointed if the Board continue opposed to it. . . . I am inclined to think that it would be better to start the Committee with 2 members of the Syndicate only, to see how it works, and then to decide whether it would be advisable to add Mr. Dharamsi to it later on.

With regard to the selection of a European member I have been through the list of our European Shareholders here and by far the most suitable of them for this position is, in my opinion, Mr. C. H. Armstrong of Messrs. Lyon & Co. Mr. Armstrong was last year Chairman of the Chamber of Commerce, and is a Trustee of the Port, and is personally qualified to be a valuable member of the Committee.

I saw him to-day and he stated he should be pleased to join but must obtain the consent of his home firm. He did not anticipate difficulty as to that, and I asked him to arrange to get a reply by telegram.

As it seems desirable that the Committee should be constituted and should hold one or two meetings before my departure, I think it would be well if the Board passed and advised me of a resolution authorising its formation as soon as possible.

The following Resolution constituting a Consultative Committee was passed by the Board on 2nd February 1909: .

RESOLVED.

(1) That until otherwise determined by the Board a Committee be constituted in Bombay under the title "The Bombay Electric Supply and Tramways Consultative Committee", to consist of such persons as may from time to time be appointed by the Board.

(2) That the functions of the Committee be solely of a consultative character, the Committee to have no power to give any instructions to any officer of the Company or to commit the Company in any manner.

(3) That the following be the first members of the Committee:--

The Managing Director of the Company in Bombay or the Manager of the Company in Bombay

Sir Sassoon David.

Mr. Shapurji B Broacha.

Mr. Dwarkadas Dharamsi.

Mr. C. H. Armstrong.

(4) That any Director or any officer of the Company holding the Power of Attorney of the Company who may be in Bombay, be ex-officio a member of the Committee

(5) That the Managing Director of the Company in Bombay or in the absence of the Managing Director the Manager of the Company in Bombay be Chairman of the Committee

(6) That it be a necessary qualification for a member of the Committee that he be a shareholder or a Debenture Stockholder of the Company.

(7) That there be a meeting of the Committee once every month and oftener should special circumstances at any time render other meetings desirable and that for attendance at such meeting or meetings and at least one of them each member of the Committee not being a Director or officer of the Company shall receive a monthly fee of Rupees Fifty.

(8) That the Managing Director or the Manager of the Company in Bombay nominate one of the Officers of the Company to act as Secretary to the Committee.

(9) That Minutes of the proceedings of all meetings held by the Committee be recorded in a book to be kept for the purpose and that copies of such Minutes be forwarded to the Secretary of the Company in London by mail following the meeting for submission to the Board of Directors.

The first Meeting of the Members of the Consultative Committee was held on 12th February 1909.

The following is the list of members of the Consultative Committee from time to time :—

	From	To
*Sir Sassoon J. David	12- 2-09	31-3-16
*Mr. Shapurji B. Broacha	12- 2-09	31-3-16
Mr. C. H. Armstrong	12- 2-09	18-5-14
Mr. Dwarkadas Dharamsi	12- 2-09	27-8-09
*Mr. Ibrahim Rahimtoola	25-10-09	31-3-16
Mr. A. Craigie	12- 2-13	28-4-14
*Mr. J. S. Wardlaw Milne	22- 5-14	31-3-16

*Continued to be Members up to the time of the Committee's dissolution on the Transfer of the Board of Directors to Bombay on 1st April 1916. They then became Members of the Board.

CHAPTER 4.

Transfer of Management from London to Bombay.

As The Bombay Electric Supply and Tramways Co., Ltd., was incorporated and registered in England with its principal registered office and management in London, it was liable, in addition to the Income Tax leviable and paid under the Indian Income Tax Act, to pay Income Tax upon all the profits of the undertaking under the English Income Tax Acts. Great hardship was thus imposed on the Company's shareholders resident in India by the imposition of the English, in addition to the Indian Income Tax. A memorial was, therefore, addressed to the Chancellor of the Exchequer in September 1909 by the Directors in London drawing his attention to the heavy burden of double taxation and the exclusion of the Indian shareholders from those privileges of exemption and abatement which were accorded under similar conditions to their fellow subjects resident in the United Kingdom. This was in marked contrast to the total immunity allowed in respect of the interest or dividends on any securities of a foreign State, or a British Possession, which were payable in the United Kingdom. The memorial added that in case of a refusal of relief, the shareholders in India might in self-defence be compelled to insist upon the transfer of the headquarters of the Company from England to India.

No relief in response to the memorial seems to have been afforded by the British Government. Indeed, in an appeal case in England (*Mitchell v. Egyptian Hotels*, 1915, A.C. 1022), where the business of the Company from which the profits or gains alleged to be chargeable to tax was carried on in Egypt by a local board elected in Egypt, and free from any control by any other directors or board or by any general meetings of the Company not held in Egypt, it was held that the Company was assessable to income tax in respect only of profits remitted to England. It was further held that if a Company was registered in the United Kingdom, it was liable for duty on the whole of its profits even though it carried on business wholly or partly abroad if the business was controlled to the least extent in the United Kingdom, but

not if nothing was done in the United Kingdom except the holding of meetings of the Company.

Some Members of the Consultative Committee which was functioning in India, therefore, raised the question of winding up the London Company. The Directors in London, however, sent a further memorial to the Chancellor of the Exchequer, Mr. Reginald McKenna, on the 3rd November 1915. At this time, the Great War was at its height and the scale of English Income Tax was unavoidably increased. The memorial, therefore, stated that unless relief was granted to such of the shareholders as were resident in India from the payment of full rate of English Income Tax, the transfer of the headquarters of the Company from England to India, hitherto regarded as a possible contingency, was then in contemplation as a regrettable necessity. The memorial added that the taxation was indefensible, as by its incidence it practically involved the alternative of compelling the Company to renounce its English status or of depriving the Indian public immediately interested in its operations, of a popular and suitable means of investment. Further, the English status of such a Company led, as experience had shewn, to orders for necessary equipment and material being placed with British rather than alien industrial concerns, and the consequent gain to British industry was *pro tanto* a source of benefit to the National Exchequer. The memorial, however, recognised that there were practical difficulties, in the way of extending to persons domiciled in India the specific privileges of partial exemption and abatement which could be claimed by those residing in the United Kingdom. The petitioners, therefore, submitted that equitable relief could be most suitably afforded by allowing Companies to compound for the liability of such persons on a reduced basis, and that in case of their constituents on the Indian register and *bona fide* residents in India, this proportion should in no year exceed the sum equal to that recoverable under the Indian Income Tax Act.

The total net loss to the Exchequer as a result of the transfer of the management of the Company to India was estimated at £ 11,000 per annum. A copy of the memorial was submitted for the consideration of Mr. Austin Chamberlain, who was then the Secretary of State for India. The reply given by the Chancellor of the Exchequer was regarded by the Board as disingenuous and possibly misleading. Indeed,

in reply to Sir John Rees, Mr. McKenna said that the Company operated a system of tramways outside the United Kingdom, and was owned predominantly by persons resident in India ; " These circumstances suggest that consideration other than the incidence of the British Income Tax may have influenced the Company in its decision."

Meanwhile, the steps to be taken to give effect to the transfer of the Board of Directors to Bombay were considered. Eventually, the Consultative Committee of the Company in Bombay with the concurrence of its London Directors summoned an informal meeting of the shareholders on the Bombay Register on the 15th December 1915 at the Empire Theatre, Sir Sassoon David presiding. After narrating the purpose for which the meeting was convened, Sir Sassoon proceeded : --

" It has for a long time been regarded by many of you as a hardship that under the provisions of the Income Tax Acts the shareholders of this Company should be subjected to the payment of double income tax. Not only, as you are aware, has the Company, as at present constituted, to pay out of its annual profits the income tax levied in India—as to which we have no ground of complaint—but it has also to pay, what amounts to a much more serious burden, the English income tax as well. The Directors of the Company have on more than one occasion striven to obtain, by means of a deputation to the Chancellor of the Exchequer and by other means, relief from this hardship. So far these efforts have not proved successful But I feel bound to tell you that in my opinion, any relief, if it be hereafter granted by the British Legislature, will only be partial. Meanwhile, we are faced with the fact that, owing to the War, a very large increase has taken place in the rate of the English tax, and it is obvious to all of us that before the War is over that increase may not improbably be further augmented. Even when the War is over it would seem to be certain, having regard to the enormous Public Debt it is accumulating, that the rate of the tax must for many years continue to be a very high one. Taking the English income tax as it stands to-day, it means, we estimate, that the Company will have to pay next year a sum of considerably over Rs. 2,00,000 on account of that tax, and that the following year even should the tax be not raised above 3 shillings 6 pence in the £, it will have to pay more the only means by which this Company can escape from liability to pay the English tax is by transferring its entire administrative control and management to Bombay. It has been decided by the Courts in England that what determines the liability to pay the tax in the case of companies which like our own were formed and registered in London but which earn the whole of their profits outside the United Kingdom, is whether or not their business is in whole or in part, however small that part, managed or directed from the United Kingdom. Therefore, we are advised by Counsel that if you are to escape from the burden of the English tax you cannot continue to have a Board of

Directors in London, or the management of the business in any form or shape conducted from the United Kingdom."

Resolutions of which we shall write later were passed at this meeting. A Requisition signed by the holders of more than one-tenth of the shares of the Company was, in pursuance of the provisions of Section 66 of the Companies (Consolidation) Act 1908, and of Article 51 of the Articles of Association of the Company, forwarded on the same date to the Directors of the Company, requiring them to convene an Extraordinary General Meeting of the Company for the purpose of considering, and, if thought fit, passing such resolutions.

Two Extraordinary General Meetings were then convened and held at the Electrical Federation Offices, 1, Kingsway, London, W. C. on 14th and 29th March 1916 respectively at which two Special Resolutions (the purport of which is given below) were passed and confirmed.

- (1) On and from the 1st April 1916, the whole of the business of the Company to be transacted, controlled, managed and conducted in and from Bombay. All General Meetings and Meetings of the Board of Directors and all classes of Meetings of Shareholders to be held in Bombay. Articles of Association of the Company to be so altered as to give effect to the above.
- (2) The Board of Directors from 1st April 1916 to consist of Sir Sassoon J. David, Sir Shapoorjee B. Broacha, Sir Ibrahim Rahimtoola and Mr. J. S. Wardlaw Milne. Statutory obligations in England to be performed by local Directors (called Local Board) if appointed and by the Secretary under the control of the Bombay Board.

Principal Register of Members to be written up in London so as to contain all the entries made in the Register kept in Bombay. Duplicate sets of books to be kept in England showing the business and transactions of the Company entered from the books kept in Bombay.

Proper audits of accounts to be made, if necessary in England also. All dividends to be declared at the Annual General Meeting and paid in and from Bombay.

Articles 127, 128 and 131 were recast.

The Extraordinary General Meetings were held in the month of March to escape from the liability to pay the English Income Tax (except upon that portion of its profits remitted to the United Kingdom) in respect of the next financial year commencing on the 5th April 1916.

The resolutions and the names of the Bombay Board were filed with the Registrar of Indian Joint Stock Companies on the 7th April 1916.

The Board of Directors on the eve of the transfer of the management to Bombay was composed of the following gentlemen in London :—

Sir Charles Ollivant, K.C.I.E., *Chairman*.

Mr. F. W. Chanter.

Mr. A. T. Cooper.

Mr. E. Garcke.

Mr. C. Shirreff Hilton.

Sir Walter Hughes, C.I.E.

Mr. F. C. Rimington, *Managing Director*.

Secretary and Offices :—

Mr. F. C. Austen,

Electrical Federation Offices,

Kingsway, London, W. C.

CHAPTER 5.

Reconstruction of the Company, 1920.

When the entire administration and control of the Company's undertaking were transferred from London to Bombay in 1916, the Board was desirous of converting the Company's Sterling Share Capital into Rupee Capital of equivalent value. They were, however, advised by the Advocate-General that, having regard to the provisions of the Company's Memorandum of Association, and to the terms of the Company's Act, that course was not legally practicable except by winding up the then London Company and the recreation of the Company as a Company with a Rupee Capital registered in India. To adopt that course did not then (in 1916) appear advantageous as, under the terms of the Trust Deeds securing the Company's Debenture-holders, those holders were entitled to claim immediate repayment of their bonds at a premium of from one per cent. to five per cent. in the event of the London Company going into liquidation, voluntary or otherwise. As the Debentures were quoted at a discount, and the repayment of their outstanding amount (£770,000) would have involved raising the money for that purpose in India, and remitting it at exchange 1s. 4d., the Directors decided not to pursue the matter further.

Afterwards the situation altered, difficulties arose from the high and fluctuating rate of sterling Exchange as affecting the amounts to be paid in Rupees in respect of dividends on both the Company's Preference and Ordinary Shares to Shareholders on the Bombay Register (who constituted ninety per cent. of the Company's Shareholders), and as affecting its accounts and financial organisation in general.

At the time of the Company's formation in 1905 and until 1918, Sterling Exchange stood, with very slight variations, at 1s. 4d. That was, prior to the war, for a great many years fixed at its par rate. So long as the rate of Exchange remained thus established no difficulties arose in treating the Company's £10 Shares as of the recognised par value of Rs. 150, and in assessing the payment of dividends accordingly. For example, the 6 per cent. dividend payable on the Preference Shares,

when converted at the standard exchange of 1s. 4d. was paid in Rupees nine per annum, while a dividend of say 10 per cent. on the Ordinary Shares was similarly paid at the rate of Rs. 15 per share. To pay these dividends to shareholders on the London Register meant remitting there practically the same sum in Rupees per share as was paid to the shareholders in India.

The simple and regular procedure thus established was ended by the rapid rise in the Rate of Exchange, its fluctuations, and the remoteness of any likelihood of it reverting to the former rate of 1s. 4d. At Exchange 2s. 9d. the Rupee equivalent of £10 (the par value of the Company's Shares) was not Rs. 150 but Rs. 71-12-0. The Board carefully considered the situation thus created and referred it for the opinion of Counsel. They were advised that it would be *ultra vires* for them to continue to pay dividends here on the basis of assessing the value of the shares at Rs. 150, as before, for that purpose. They were further advised that no Extraordinary General Meeting of the Shareholders could give them legal authority to continue to so value the shares for dividend purposes. Both the Company's legal advisers and also its Auditors were of opinion that the only course open to the Directors, in view of the fact that Exchange was no longer stabilised, was to declare and pay the Preference Dividend at 6 per cent. (the rate provided by the Company's Articles of Association) on the £10 Preference Shares, and to declare and pay the Ordinary Share Dividend at the rate from time to time declared on the £10 Ordinary Shares, and to convert at the then current Rate of Exchange both these dividends into Rupees for the purpose of fixing the amounts to be paid as dividends to the Shareholders in India.

It was obvious that the procedure thus imposed on the Directors would have operated to the serious disadvantage of the Shareholders in India. The linking of the amount of the sums paid as dividends to a fluctuating Rate of Exchange would have meant that uncertainty must prevail as to what the Shareholders in India would have actually received. For example, the half-yearly dividend paid at Bombay to the Company's Preference Shareholders, which had heretofore been Rs. 4-8 per share (namely, 6 shillings at exchange 1s. 4d.) would have at Exchange 2s. 9d. amounted to only Rs. 2-3-0 per share. And from half year to half year this payment might

have been more or less. Similarly, the Company's Annual Balance Sheet and Annual Accounts, which for circulation in India had always been converted from Sterling into Rupees at the fixed rate of 1s. 4d. would have, as matters stood, to be converted at the rate of exchange of the 31st December of each year, and continuity and the means of comparison with previous years' accounts, would thus have been destroyed.

This being the situation, and the Company being faced with the necessity of creating further Share Capital to provide for Capital Expenditure incurred and to be incurred, the Directors decided to reconstruct the existing Company in such a manner as to get rid for all time of the embarrassments described and of other risks and difficulties attendant thereto. For this purpose they resolved to place the existing (English) Company into voluntary liquidation and to transfer its Concession and all its other assets whatsoever to a new Company, to be registered at Bombay, which would issue to its Shareholders Rupee Shares in exchange for their £ Shares in the existing Company, and which would pay off the £ Debentures of the latter Company.

In addition to the reasons above mentioned there existed, in the opinion of the Directors, the following further reasons for liquidating the London Company and reconstructing it as a Company with an entirely Rupee Capital :—

(1) It would remove all difficulties and complications, present and prospective, which resulted from the existing Company having its Capital in Sterling, and enable dividends to be declared and paid independently of all fluctuations in exchange.

(2) It would render practicable the reconstruction of the Company on terms more equitable and more favourable to its existing Shareholders in respect of its capitalisation than, if the Company as then constituted, was kept alive.

(3) The Company, when reconstructed as a purely Indian Company, would cease to be amenable to any further legislation relative to taxation, either on income or on capital, which might thereafter have been passed by the British Legislature affecting Companies registered in England and capitalised in Sterling.

(4) The work conducted at the London Office would be much simplified and reduced, the keeping of Share and Debenture Registers there abolished, and the filing of various statutory returns with the Registrar of Joint Stock Companies no longer necessary.

For these reasons, the Directors recommended the Shareholders by a Circular issued to them over the signature of Mr. F. C. Rimington, the Managing Director, on the 19th February 1920 to take the necessary steps to wind up and terminate the existing London Company and to reconstruct the Company as an Indian Company. A notice summoning an Extraordinary General Meeting of the Company by the Secretary was attached to this Circular.

The following was the scheme which the Directors recommended for the approval of the Shareholders to give effect to the proposed reconstruction of the Company :—

(1) To register a new Company at Bombay with a Rupee Capital consisting of :—

	Rs.
180,000 7 per cent Preference Shares of Rs. 50 each	90,00,000
600,000 Ordinary Shares of Rs. 50 each	3,00,00,000
	<u>3,90,00,000</u>

(2) To issue to the Shareholders three Preference Shares of Rs. 50 each of the new Company for each one Preference Share of £10 each they held in the English Company ; and five Ordinary Shares of Rs. 50 each for each one Ordinary Share of £10 each they held in the existing Company.

(3) To transfer the whole of the assets of the existing Company to the new Company, and place the existing Company into Voluntary Liquidation.

This distribution of the New Company's shares was to absorb the whole of its Preference Shares, and to leave a balance of 60,000 of its Ordinary Shares held in reserve for future issue as and when required for the purposes of the undertaking. This balance was arrived at after taking into account the proposed issue of additional Ordinary Shares of the existing Company.

As it was necessary to provide the requisite funds to pay off the Company's Debenture Debt, amounting at this time to about £710,000, and by the same issue of additional shares to provide funds to pay off the existing overdraft with the Company's bankers of about Rs. 14,00,000, and to meet for some time ahead the Company's prospective capital expenditure on further development of its undertaking, the Directors recommended the adoption by the shareholders

at the same Extraordinary General Meeting of a Resolution authorising the immediate issue, and offered for subscription to the then shareholders, of 25,000 new Ordinary £10 Shares of the existing Company upon *inter alia* the following terms :—

(1) All the 25,000 new shares to be offered at the price of Rs. 500 per share to the existing shareholders, and each shareholder whose name appeared on the Register of Shareholders of the Company on the 15th March 1920, to be entitled to receive an allotment of one Ordinary Share in respect of every four Ordinary Shares held by him and of one Ordinary Share in respect of every existing sixteen Preference Shares held by him

(2) Applications from shareholders resident in India for new shares to be received up to 12th April 1920.

(3) Payment for the new shares to be made as follows

Rs. 200 on application

Rs. 300 on allotment.

(4) In the case of shareholders resident outside of India, applications for new shares and payment of the application and allotment calls to be made up to the 1st June 1920.

(5) The new shares to rank for dividend as from the 1st January 1920, upon the full amount (£10) of the said shares.

The issue of these additional 25,000 Ordinary Shares was thus to increase the Ordinary Share Capital of the Company by £250,000, making a total of 108,000 Ordinary Shares issued of the par value of £1,080,000.

If and when the existing Company was reconstructed, it was provided in the above Scheme to fix the rate of dividend on the Preference Shares of the new Company at 7 per cent. per annum instead of 6 per cent, the existing rate. The reasons for proposing this change were :—(a) that since the Company was formed in 1905 rates of interest on Government Securities, Debentures, and other gilt-edged stocks had greatly risen ; (b) that 6 per cent. was not in 1920 regarded as an adequate dividend even on first class industrial shares as was evidenced by flotations of such shares, both in India and in England, fixing that rate at from 7 to 7½ per cent ; (c) that it seemed only fair and equitable that the Preference Shareholders, as well as the Ordinary Shareholders, should derive some advantage from the proposed reconstruction of the Company.

The proposed issue of 25,000 additional Ordinary Shares of the existing Company at the price of Rs. 500 per share was calculated to produce, when subscribed, Rs. 1,25,00,000.

Of this amount, a sum of about Rs. 52,00,000 was, it was estimated (if Exchange remained at about its then level), required to pay off the Company's Debenture Debt on the terms provided by the Trust Deeds, and a further sum, estimated at about Rs. 3,00,000, was needed for the stamp duties, and other costs, necessitated by the winding up of the old Company and the transfer of all its assets to the new Company. After meeting these outgoings, and paying off the overdraft, it was estimated that, out of the proceeds of the issue, a balance of about Rs. 56,00,000 would remain available for capital expenditure required for the development of the undertaking.

The extinction of its Debenture debt was to free the Company from the charge for the annual interest thereon, which in the Balance Sheet of 1918 appeared at Rs. 5,00,800. Deducting Rs. 90,000 required to provide the increased one per cent. per annum on the Preference Shares, the consequent annual net gain to Profit and Loss Account was calculated to be Rs. 4,10,000 on the former basis of keeping the accounts.

In view of all the facts and circumstances set out above, the Directors unhesitatingly regarded the proposed reconstruction as advantageous both to the Company and to its shareholders, and recommended the passing of the necessary Resolution in sanction of it.

As it was necessary, under the terms of the Concession to obtain the formal sanction of the Bombay Municipal Corporation to the assignment of the Concession and other assets of the existing London Company to the new Company to be created at Bombay (under Clause 18 d) and to go into liquidation (under Clause 20 c), a letter dated the 21st February 1920 was addressed to the Municipal Commissioner requesting him to obtain the sanction of the Corporation.

An Extraordinary General Meeting of the Members of the Company was held at the registered offices of the Company, Colaba Causeway, Bombay, on Wednesday, the 3rd day of March 1920, under the Chairmanship of Sir Sassoon David, Bart., whereat the following Resolutions were duly passed :—

(1) That the Scheme of Reconstruction of the Company described in the Managing Director's letter to the Shareholders, dated the 19th February 1920, is approved, and that the Directors are desired and authorised to take all necessary steps to give effect to such Scheme.

(2) That the Capital of the Company be increased from £ 1,430,000 divided into 60,000 six per cent. Cumulative Preference Shares and 83,000 Ordinary Shares, all of £ 10 each, to £ 1,680,000 by the creation of 25,000 additional Ordinary Shares of £ 10 each, ranking for dividend and in all other respects *pari passu* with the existing Ordinary Shares of the Company, save that such, 25,000 additional Ordinary Shares will not be entitled to participate in any dividend that may be declared for the year ended the 31st December 1919.

(3) That the Directors be and they are hereby authorised to issue forthwith the whole of the 25,000 additional Ordinary Shares, and that such additional shares be offered to the Shareholders of the Company upon the terms set forth in the Managing Director's letter to the Shareholders, dated the 19th February 1920.

The Managing Director's letter of 21st February 1920 to the Municipal Commissioner was submitted by the latter with his letter of recommendation, dated the 24th February 1920, to the Corporation as urgent business. The matter was, on the proposal of Dr. Nadirshaw H. E. Sukhia, seconded by Mr. Hooseinbhoj A. Lalljee, referred by the Corporation to the Tramways Committee on 26th February 1920. At their meeting held on the 29th March 1920, the Tramways Committee decided to recommend the Corporation to agree to the Company's Reconstruction Scheme. The proposal was sanctioned by the Corporation under their Resolution No. 259, dated the 12th April 1920, viz., "to go into voluntary liquidation and reconstruct as an Indian Company registered only in Bombay."

The procedure to be adopted in connection with the proposed Reconstruction of the Company was in short as follows :—

Messrs. Tomlin and Clouston, the leading Company Law experts in England, both advised that the Company having been formed under the English Companies Act was governed by that Act and not by the Indian Companies Act and that reconstruction could only be carried through legally under the English Act, because unless the Scheme was sanctioned under Clause 120 by the Court in England any shareholder could apply for and obtain an injunction to upset it. These lawyers could not advise the Board or the Liquidator to incur the serious risk and liability which might arise from the proposed Reconstruction under the Indian Companies Act. Mr Inverarity, who was in England at this time, also concurred in this opinion. Under these circumstances, the only prudent course appeared for the Board to promptly cable their approval to London to apply to the Court in England for the Order of the High Court to call a meeting of the Shareholders of the Company to approve, under Section 120 of the Companies (Consolidation) Act, 1908, the proposed Reconstruction of the Company. It may be noted

that the arrangement would become binding on all the shareholders and also on the Company only if a majority in number representing three-fourths in value of the shareholders present either in person or by proxy at the meeting agreed to it and the same was sanctioned by the Court on re-submission afterwards.

The following Resolution No. 1193 was passed by the Board at their meeting held on the 30th April 1920 :—

“ Resolved that the Board approve of an application being made to the High Court in London under Section 120 of the Companies (Consolidation) Act 1908 with a view to obtaining the sanction of that Court to the proposed arrangement for the reconstruction of the Company on a Rupee basis, and that Mr. F. C. Rimington be and he is hereby authorised to take all such steps and incur all such expenses as he may consider or may be advised to be necessary to obtain such sanction.”

By Clause 2 of each of the Licenses, *viz.*, The Bombay Electric License, 1905, and The Bombay Electric Traction License, 1907, the Licenses are to be read and construed subject in all respects to the provisions of the Indian Electricity Act. As Section 9(2) of the Indian Electricity Act enacts that “ the Licensee shall not at any time assign his License, or transfer his undertaking, or any part thereof, by sale, mortgage, lease, exchange or otherwise, without the previous consent in writing of the Local Government,” an application to the Chief Secretary to Government, Public Works Department, Bombay, was made on behalf of the Company by our Solicitors on the 29th May 1920 for their sanction to the transfer by the Company to the new Company of the above Licenses.

To this, Government by their letter of 25th June 1920 replied that as soon as the new Company was registered in Bombay with the necessary powers to acquire the above Licenses and the combined undertaking, it would be prepared to consent to the Company assigning them to the new Company for the purpose of carrying out the reconstruction of the existing Company on a Rupee basis, subject nevertheless to the performance of the obligations imposed upon the Licensee under the above Licenses, the Indian Electricity Act, and the Rules for the time being in force under that Act.

Meanwhile, upon an application No. 00151 of 1920 made by the Company on the 5th May 1920 in the High Court of

Justice, Chancery Division, London, Mr. Justice Astbury ordered on the 7th May 1920 as follows :—

(1) To summon and hold in London separate Meetings of the Preference and Ordinary Shareholders respectively for the purpose of enabling them to receive an explanation of the Scheme and to facilitate the lodging of proxies for use at the meetings hereinafter directed to be held in India.

(2) The Company to convene not less than fourteen days after the aforesaid meetings in London separate meetings to be held in Bombay of (1) the holders of Preference Shares, and (2) the holders of Ordinary Shares, for the purpose of considering and if thought fit approving the Scheme of Arrangement proposed to be made between the Company and its holders of Preference and Ordinary Shares respectively.

(3) The holders of Preference and Ordinary Shares to be at liberty to give proxies to persons named in the proxy forms as settled in Chambers or to any other person entitled to vote at the meetings whom they thought proper. The proxies to be deposited at the registered office in London before or within 3 days after the holding of the Meetings in London as aforesaid.

(4) The Secretary of the Company to report by cablegram to the office of the Company in Bombay not later than 10 days prior to the holding of the meeting in Bombay the totals of such proxies for and against the Scheme to be used at the meetings in India, giving the name of any shareholder on the Colonial Register included in such totals and to verify by and file an affidavit of the results of the lodging of such proxies for use at the hearing of the Petition to confirm the said Scheme.

(5) At least 10 clear days before the day appointed for the said meetings to be held in London, to insert once each in the *London Gazette* and in the *Times* newspaper an advertisement convening the said London and Indian Meetings. And in addition, at least 10 clear days before the day appointed for the said London Meetings, a notice convening the said London and Indian Meetings and enclosing a copy of the said Scheme, an explanatory circular, and a proper form of proxy for use at the said meetings in India to be sent by post to each of the Preference and Ordinary Shareholders on the principal Register other than those who were also on the Colonial Register; and *vice versa* for the Indian Meetings the advertisement to be published in India in the *Bombay Government Gazette*, *The Times of India*, *The Bombay Samachar*, and *The Bombay Chronicle*.

(6) Sir Sassoon David, failing him Sir Stanley Reed, failing him Mr. (as he then was) Chunilal V. Mehta to be the Chairman of the respective meetings to be held in Bombay. Chairman to use at the Meetings in Bombay all proxies duly lodged or notified and to report the result thereof by lodging the said report duly verified by affidavit with the Registrar of Joint Stock Companies at Bombay.

(7) Arrangements to be made for the full tenor of such report to be communicated by cablegram by the said Registrar to the Registrar of Companies Winding up, Carey Street, Lincoln's Inn, London, and for the said report and affidavit to be at once transmitted by post by the Bombay to the London Registrar.

Meetings of Ordinary and Preference Shareholders were accordingly summoned and held in London at the Company's Office on the 9th June 1920, Mr. F. C. Rimington, who was in England in connection with the Reconstruction of the Company, occupying the Chair. Some half dozen shareholders attended. In all 86 proxies were received. All of these were in favour of the resolutions to be submitted at the Bombay Meetings. (26 Ordinary Share Proxies representing 838 shares, and 59 Preference Share Proxies representing 2,783 shares including 16 Ordinary and 190 Preference Shares on the Bombay Register).

Likewise, two meetings, one of Ordinary Shareholders and the other of Preference Shareholders, were convened and held at the Company's Office in Bombay at 4-45 P.M. and 5-30 P.M. respectively on the 30th June 1920. In the *Circular dated the 14th June 1920 issued by the Secretary to the Shareholders summoning the above meetings, an additional reason for winding up of the Company was furnished by the fact that under the terms of the new British Budget then introduced in the House of Commons, all companies, which were registered and formed in the United Kingdom, were required to pay what was called the Corporation Tax, namely, a tax of 5 per cent. on their annual profits, irrespective of where they earned those profits. This would have cost Rs. 2½ lakhs a year. Corporation Profits Tax from 1st January 1920 to 14th September 1920, the date on which the Company went into voluntary liquidation, was settled by Mr. Rimington with the Inspector of Taxes in London and a sum of £8,976-4 paid by the Company on 28th November 1922.*

Sir Sassoon David presided over these Meetings, as he held both Ordinary and Preference Shares of the Company. He said in his speech that the propositions, which were put before the shareholders that day, represented the measures actually required by the law to carry out their decisions made at their meeting held on the 3rd March 1920. "As many of you

know the English Courts are exceedingly strict in interpreting the terms of the Companies Act. The resolutions submitted to you follow exactly the provisions of that Act, and carry out the orders of the Judge before whom this matter has been in Chambers. If we are to proceed expeditiously with the Scheme which you have sanctioned, it is essential that these propositions should be carried as they stand; any variation of them, no matter how slight, may delay the reconstruction of the Company for an indefinite period."

The Scheme was put to the vote and passed unanimously.

At the Ordinary Shareholders' Meeting 33 shareholders were present. At the Preference Shareholders Meeting only 17 shareholders were present. The proxies were audited by Messrs. A. F. Ferguson & Co. The following is a summary of the votes recorded :—

Votes at the Ordinary Shareholders Meeting

Shareholders present	..	33 Shares	1,417
Bombay Proxies	..	2,349 ..	29,711
London	.. ..	26 ..	838
		2,408 ..	31,066

Votes at the Preference Shareholders Meeting -

Shareholders present	..	17 Shares	492
Bombay Proxies	..	1,027 ..	18,414
London	.. ..	59 ..	2,783
		1,103 ..	21,689

The Auditors had to reject as incomplete 316 Ordinary Proxies representing 2,595 shares, and 98 Preference Proxies representing 887 shares.

A cable giving the tenor of the Report of the Chairman of the above two meetings was despatched to the London Registrar by the Registrar of Companies, Bombay, on the 1st July 1920. A certified copy of the Report of the Chairman and of his Affidavit verifying the same was sent to the London Registrar by our Solicitors on the 10th July 1920.

A Petition was then filed by Mr. Sydney Morse, the Company's Solicitor in London, with the Chancery Division of the High Court. This Petition was supported by an affidavit by Mr. Rimington as Managing Director of the Company, certifying that the facts therein stated were correct. The Petition came on for hearing before Mr. Justice Astbury on the 20th July 1920. Mr. Clauson, K.C., with Mr. Whinney appeared for the Company, and the former briefly explained to the Judge the grounds of the application. There was no opposition, and after a few queries and remarks the Judge sanctioned the Petition.

SCHEME OF ARRANGEMENT.

(1) That the whole of the Debentures and Debenture Stock issued by the Company with any premiums payable in respect thereof, and all other cash liabilities of the Company be forthwith, on the Company going into liquidation as hereinafter provided, paid and discharged out of the cash in hand.

(2) That a new Company be formed and registered in Bombay under the Indian Companies Act, 1913, with a Rupee Capital of Rs. 3,90,00,000, divided into 180,000 7 per cent Cumulative Preference Shares of Rs. 50 each, entitled to a preference in capital in the event of liquidation, but to no further interest in surplus assets, and 600,000 Ordinary Shares of Rs. 50 each.

(3) *That the whole of the undertaking and assets of the Company be sold and transferred to such new Company, free from all incumbrances, in exchange for 180,000 of such Preference Shares of Rs. 50 each, fully paid up, and, 540,000 of such Ordinary Shares Rs. 50 each, fully paid-up, the new Company undertaking to pay all claims and liabilities that may be established in the winding up of the Company, and also all the costs and expenses of the winding up.*

(4) That three of such Preference Shares of Rs. 50 each be issued to the holder of each one Preference Share of £ 10 in the Company, and five of such fully paid Ordinary Shares of Rs. 50 each, be issued to the holder of each one Ordinary Share of £ 10 in the Company.

(5) If any holder of shares in the Company who has not voted in favour of this Scheme shall, within seven days after this Scheme shall have been submitted to a meeting of the class of Shareholders to which he belongs, express his dissent therefrom, and being a Shareholder resident in British India, by a notice in writing addressed to the Company and sent to or left at its Registered Office in Bombay, or being a Shareholder resident in the United Kingdom, by a notice in writing addressed to the Company and sent to its Registered Office in London (195 Strand, W.C. 2), such member shall be entitled to require

the Company, in the event of the Scheme being proceeded with, in the same way as if there had been a scheme or sale falling within the provisions of Section 192 of the Companies (Consolidation) Act, 1906, to purchase or procure the purchase of his interest at a price to be decided by agreement or by arbitration in pursuance of the Arbitration Act, 1889, and this Scheme shall not be carried into effect unless provision is accordingly made for the purchase of the interests of such dissentient Shareholders.

(6) Those shares in the New Company (if any) which, but for their dissent, would have been claimed by those members of the Company who dissent from this Scheme in manner aforesaid shall be sold by the Liquidators on such terms as they shall deem most advantageous to the interests of the Shareholders, and the net proceeds of such sale shall be applied in or towards payment of the amount payable to such members as agreed or settled by Arbitration for the purchase of their interests, and in the event of any deficiency the new Company shall make up such deficiency.

(7) That for the purpose of carrying this Scheme into effect the necessary steps be taken to wind up the Company voluntarily.

To carry further the reconstruction of the Company which the Shareholders had approved and the English Court sanctioned, it was now necessary formally to complete the process to liquidate the existing Company in order that its business might be transferred to the Rupee Company which would be registered in India. An Extraordinary General Meeting of the Company was, therefore, convened and held under the Chairmanship of Sir Sassoon David on the 30th August 1920, at which the following Extraordinary Resolutions were passed :—

RESOLUTIONS.

(1) That the Company be wound up voluntarily.

(2) That Frank Cartwright Rimington, Esquire, and Nanabhoy Hormasji Moos, Esquire, be and they are hereby appointed jointly and severally Liquidators of the Company for the purpose of such voluntary winding up, and that without prejudice to the premises the said Frank Cartwright Rimington be and he is hereby authorised to exercise alone in England every power given to them jointly and severally as Liquidators and that during the absence of the said Frank Cartwright Rimington from Bombay the said Nanabhoy Hormasji Moos be and he is hereby authorised to exercise alone in Bombay every such power, and that each of the said Liquidators be and he is hereby authorised to delegate, if necessary, all or any of the powers hereby conferred upon him.

(3) That the said Liquidators be and they are hereby jointly and severally authorised to carry into effect the Scheme of Arrangement sanctioned by an Order of the High Court of Justice in England, dated the 22nd day of July, 1920, and made in the matter of the

Companies (Consolidation) Act, 1908, and in the matter of The Bombay Electric Supply and Tramways Company, Ltd. (No. 00151 of 1920) and to do all things necessary to give full effect thereto.

(4) That the said Liquidators be and they are hereby jointly and severally authorised to consent to the registration of a New Company to be called The Bombay Electric Supply and Tramways Company, Limited, having for its principal object the acquisition of the entire undertaking of this Company as a going concern and with a Memorandum and Articles of Association approved by the Board of Directors of this Company.

(5) That the remuneration of the said Liquidators shall be the sum of Rs. 50,000 to be divided between them in such proportion as the said Liquidators shall determine.

(6) That the Directors of the Company be and they are hereby empowered to continue to exercise, subject to the joint and several supervision of the said Liquidators, their powers as Directors for the purpose of carrying on the business of the Company until the entire undertaking shall have been transferred as a going concern to the new Company and the new Company shall have become entitled to commence business.

(7) That the draft agreement submitted to this meeting and expressed to be made between this Company and Nanabhoj Hormasji Moos, one of its Liquidators, of the one part and The Bombay Electric Supply and Tramways Company, Limited, of the other part, be and the same is hereby approved, and that the said Liquidators be and they are hereby jointly and severally authorised to enter into the said agreement and to execute and do on behalf of the Company all such acts, deeds, matters and things as are necessary or desirable to give full effect thereto.

A further Extraordinary General Meeting was held on the 14th September 1920 whereat the report of the proceedings at the above meeting was received and the Resolutions passed thereat were confirmed as Special Resolutions.

Since this date, the Company was held to be in voluntary liquidation. The procedure adopted in the proceedings of liquidation was as follows :—

(1) In considering the procedure, two things were to be borne in mind :—

(a) that the Liquidation was for the purpose of reconstruction in accordance with the Scheme approved by the High Court, viz., the sale of the old Company's undertaking to a new Company for shares ;

(b) that by the terms of such Scheme the Debenture Debts and other cash liabilities of the old Company were payable by the Liquidator out of the cash in hand.

(2) As from the commencement of the liquidation, the Company ceased to carry on business except so far as required for the beneficial winding up thereof.

(3) Transfers of shares made after such commencement without the sanction of the Liquidators were void by Section 306.

(4) Notice of the fact of the Liquidation was given by advertisement in the *London Gazette* and filed at the Company's office at Somerset House. (Section 185).

(5) Under Section 188 of the English, and Section 209 (1) of the Indian Companies Acts the Liquidators within seven days of their appointment gave notice of holding meetings of creditors. Mr. Rimington published this notice in the *London Gazette* and two daily papers in England and Mr. Moos published in the *Bombay Government Gazette* and daily papers. The meetings were convened and held in London and Bombay on the 4th and 6th October 1920 respectively. These meetings were purely formal. Mr. Rimington had also advertised for claims in the usual way in the above notice, but as the creditors were by the Scheme to be paid in full and there was plenty of cash for the purpose, the meetings ended peacefully.

(6) By the terms of the Trust Deeds dated (1) 7th November 1905 to secure Debenture Stock carrying interest at the rate of 4½ per cent., and (2) 13th November 1909 to secure Second Mortgage Debentures carrying interest at the rate of 5 per cent. the Company, having gone into voluntary liquidation, the Debenture Stock and Debentures together with the premium of £ 5 per cent. in the case of the Debenture Stock and £ 1 per cent. in the case of the Second Debentures became payable together with interest. Consequently, notices were given to the holders of these securities for repayment by the liquidators. These were also published twice in the *London Times* and *Daily Telegraph* of the 2nd and 9th October 1920.

The First Mortgage Debenture Stock with a premium of 5 per cent. together with interest at 4½ per cent. per annum from 1st July 1920, less tax, was paid on behalf of the Company by The Fata Industrial Bank, Ltd., of 8, Bishopsgate, London, E.C., on or after the 1st January 1921. Similarly, the Second Mortgage Debentures with a premium of one per cent. together with interest at the rate of 5 per cent. per annum from the 1st July 1920, less tax, was paid, on behalf of the Company, by Messrs. Glyn, Mills & Co., of 67, Lombard Street, London, E.C., on or after the 1st January 1921. If any party wanted to have repayment earlier, the Bankers were instructed to pay at any time after the 31st October 1920, but with interest at the aforesaid rate to date of payment only. In any event the interest on these Debentures ceased after the 31st day of December 1920.

(7) The necessary monies for discharging the Liability in the United Kingdom were obtained by remittance from India as follows

	£	s	d.	Rs.	a.	p.
Telegraphic Transfers..	7,75,640	12	6	90,79,206	3	9
Reverse Councils ..	1,50,389	10	8	14,65,223	10	11
	9,26,030	3	2	1,05,44,429	14	8

at the average rate of 1s 9½d exchange

(8) As stated the whole undertaking was taken over from the 1st January 1920. In view of the terms of the Agreement; the working profit earned on and after the 1st January 1920 was made available for dividend on the shares of the new Company.

(9) The whole undertaking meant the undertaking with all rights and liabilities. In other words, the new Company took over the whole of the staff and employees of the old Company and was bound by any existing Agreements with any of the staffs or employees. Again, the new Company was bound to carry out the terms of any pending Contracts. In the same way, Insurance Policies were to be renewed in the name of the new Company.

The final assignment of the undertaking was executed between The B.E.S. & T. Co., Ltd. (in voluntary liquidation) and Mr. N. H. Moos, one of the Liquidators of the old Company of the one part and the B. E. S. & T. Co., Ltd. (new Company) of the other part on the 22nd December 1920. The new Company, therefore, commenced business from this date.

The consent of the Government to the assignment of the Licenses was given after taking an undertaking from the Company on 21st September 1921.

The expenses incurred in connection with the Reconstruction and Winding up of the old Company up to 31st December 1921 amounted to Rs. 1,90,629-4-5. This included Stamp Duty, Registration Fees, Legal expenses both in India and England, Postage, stamps on proxies, etc., printing and stationery, special allowances paid to London and Bombay Secretaries, signing Share Certificates, Clerical Staff, Auditors and Architects, Sundry expenses and Payment to Liquidators.

Following the practice prevailing in England, an application for refund of Stamp Duty of Rs. 50,000 paid on the transfer of the undertaking of the old Company to the new Company was made to the Bombay Government. This was not accepted. A petition was, therefore, made to the Government of India, but this was also rejected by them.

CHAPTER 6.

Development of Tramways.

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PART II

TRACTION.

CHAPTER 6.

Development of Tramways.

When the Bombay Tramway Company, Limited, was taken over by the Bombay Electric Supply and Tramways Company, Limited, and ceased to exist on the 2nd August, 1905, the total length of the tramways was 17.377 route miles. The work of reconstructing the tramways for electric traction was energetically proceeded with and traffic by horse traction was well maintained during the conversion. The first portion of the route from Colaba Terminus to Crawford Market—2.58 route miles—was opened on May 7th, 1907; a further section from Boru Bunder to Sir J. J. Hospital—1.81 route miles—on 1st June, 1907. On 10th July the section from the J. J. Hospital to Victoria Gardens—1.22 route miles—was completed. The receipts per car mile for the period from the 7th May to the 7th June, 1907, by the electric cars averaged 13.85*d* as compared with an average of 8.31*d* per car mile with horses. By 31st December, 1907, 13.01 miles of route, were being worked by electric traction. The remainder of the system, 7.37 miles was worked by horses, the horse cars also running over a portion of the electrified route. The electrification of the remaining routes was completed in 1908 and from the 18th May of that year the entire system, comprising 20.38 route miles (including authorised extensions) operated by electricity. With the exception of half a mile, the tramways were double track throughout.

EXTENSIONS.

1. In 1905, the Company applied to the Municipality for the following extensions to the existing tramways

	Approximate Route Length Feet
1. From Girgaum Road Terminus to Goshala Tank	4,100
2. From Terminus in Grant Road westwards to junction with Extension No. 1	1,800
3. From Falkland Road Terminus over the Bridge to Tardeo Road	1,900
Carried over	7,800

	Approximate Route Length Feet.
Brought over ..	7,800
4. From Jacob's Circle along Arthur Road ..	2,800
5. From Parel (Tram) Terminus along Sopari- bag Road to Elphinstone Road	5,100
6. From Charni Road Station to Byculla Bridge <i>via</i> Kamatipura Foras Road ..	10,000
7. From Mombadevi along Girgaum Back Road to Charni Road	4,100
8. Colaba Causeway (conversion from single to double)	2,300
Total ..	32,100
	6 miles.

The Tramways Committee considered the proposed extensions on the following basis (29-8-1905) :—

Corporation Resolution No. 2224, dated the 25th March, 1881.

" That the Corporation is of opinion that permission may be given to the proposed extension of tramways (from Pydhowni through Babu Khote Street, etc.), as approved by the Municipal Commissioner, and the Corporation recommends the Commissioner to take into consideration, on this as on all future occasions, that the Tramway Company shall undertake to provide a carriage roadway on each side of the tramways of not less than twelve feet, the Municipality on their side undertaking to give them all the assistance in their power to enable the Tramway Company to buy up land necessary for the widening of the streets as opportunity shall occur and that in all tramways to be laid down, either by way of extension or renewal, the groove for the flange of the tramway wheel shall be reduced to the smallest practicable width."

" 3. The Committee beg to invite the Corporation's attention to their Resolution No. 2224, dated the 25th March, 1881, quoted above, and to state that they are of opinion that a carriage road-way of not less than twelve feet, therein recommended to be left on each side of the Tramway line, will not give sufficient accommodation for other traffic on roads, over which the Tramway runs. The Committee beg to suggest that the Corporation should lay it down as a general rule, to which exceptions can be permitted only for very special reasons, that for all future extensions of the Tramway the road should be wide enough to admit of a clear track being left for other traffic, 16 feet in width, measuring from either side of the car in the case of single lines, and from the nearest side of the car in the case of double lines."

and submitted the following recommendations in respect of them for the approval of the Corporation :—

" *Extensions Nos. 1 and 2* may be approved subject to the condition that the terminus should be at the junction of Gowalia Tank and Grant Roads opposite the Fire Brigade Station, and subject also to the condition of the proposed General Rule, except in regard to certain narrow portions of Girgaum Road, where the Committee think the condition can be relaxed in view of the set-backs laid down on that road.

" *Extensions Nos. 3 and 4* may be approved subject to the condition of the General Rule

" *Extension No. 5* may be approved, subject to the condition of the General Rule, except as to portions of narrow roads where set-backs are laid.

" *Extension No. 6* may be approved, subject to the condition of the General Rule, and the further conditions that (1) the terminus should for the present (pending consideration of further plans to be submitted by the Company) be at the existing terminus at Girgaum, and not at Alibless Baug, as proposed, and (2) that the Company should acquire land for widening the narrow street near Kamathipura Lane.

" *Extension No. 7.* In view of the narrowness of the streets through which the proposed line would pass and the very heavy traffic on them the Committee are unable to recommend approval of this extension

" *Extension No. 8* may be approved, subject to the condition of the General Rule "

The Corporation passed the following Resolution on 25th September 1905 :—

" No. 2963. That the Report, dated the 20th August, 1905, of the Committee appointed by Corporation Resolution No. 2168, dated the 10th August, 1905, on the proposed extensions of the Tramway system, be approved and adopted, and a copy be forwarded to the Commissioner for information and guidance both in regard to the extensions at present proposed by the Bombay Electric Supply and Tramways Company and in regard to the General Rule suggested by the Committee for all future extensions "

The Municipal Commissioner wrote to Government on 6th October 1905, requesting their approval to the proposed extensions under Section 3 of the Bombay Tramways Act I of 1874. As the Commissioner of Police considered some of the extensions objectionable owing to the narrowness of the roads, the Government sanctioned extensions Nos. 2, 3 and 4

(14-3-1906). As regards the remaining extensions, the Government wrote as follows :—

“ 2. The following extensions will also be sanctioned by Government if the Municipal Commissioner is satisfied that in each case the road is wide enough to admit of a clear track being left for other traffic, the track to be 16 feet in width measuring from either side of the car in the case of single lines and from the nearer side of the car in the case of double lines.—

5. From Parel Tram Terminus along Soparibaug Road to Elphinstone Road.

6. From Charni Road Station to Byculla Bridge *via* Kamatipura, Foras Road.

“ The Municipal Commissioner should submit a report on this point to enable formal orders to be issued.

“ 3. The Municipal Commissioner for the City of Bombay should be requested to refer again the proposed extensions Nos. 1 and 7 to the Corporation with reference to the remarks of the Commissioner of Police, Bombay. Perhaps the construction of Extension No. 1 might be deferred till the completion of the Improvement Trust's road between Chowpati and the top of Gowalia Tank hill, which will take most of the carriage traffic that now goes over the route of the proposed extension.”

The whole matter including the General Rule laid down by the Corporation requiring the Company, in the case of future extensions of its Tramway lines, to leave for other traffic, on either side of a Tramway, a clear track of 16 feet, measured from the outside of its cars, exceptions to the rule being permitted only for very special reasons (for which Mr. Rimington had very strongly protested), was referred to the Committee of the Corporation regarding Tramway Extensions. Their Report (28-4-1906), which was approved and adopted by the Corporation on 5th July, 1906, was as follows :—

“ The Committee appointed by Corporation Resolution No. 5324, dated the 8th February, 1906, beg to submit the following report in reference to that Resolution and Corporation Resolution No. 147, dated the 9th April, 1906.

“ With the Commissioner's letter referred to in the Resolution first above quoted has been received a letter, dated the 16th November, 1905, from the Managing Director of the Bombay Electric Supply and Tramways Company, Limited, in which various considerations are advanced against the General Rule laid down by the Corporation (at the

instance of the Committee appointed by Corporation Resolution No. 2168, dated the 10th August 1905) requiring the Company, in the case of future extensions of its Tramway lines, to leave for other traffic, on either side of the Tramway, a clear track of 16 feet, measured from the outside of its cars; exceptions to the rule being permitted only for very special reasons. The Company urge that the condition of a 16 feet clearway is unnecessarily stringent and will seriously hamper tramway extensions in the City, and that it will not be possible for them to bear the cost of widening streets up to the limit laid down by the Corporation. They recognise, however, their obligation to make, in some instances, a contribution towards the cost of street alterations specially required for greater efficiency and convenience in the operation of their cars (e.g. the doubling of a single line or easing the radius of a curve), but they ask that even in these instances any payment made by them should be considered as a claim against the Corporation repayable in the event of that body purchasing the Tramway undertaking.

" 3. In another letter from the Managing Director, dated the 4th April, 1906, which the Commissioner has forwarded direct to the Committee, and copy of which is attached to this Report, the Company go further and state that the new regulation is a most grave injustice to their shareholders, because (to quote the Managing Director's own language) " it was distinctly understood in the negotiations for raising the necessary capital to enable the Corporation to buy out the old Company that the Municipality was most desirous for the rapid extensions of the electrified tramway. . . . " and " if instead of adhering to its then existing regulation of a 12 feet clearway the Corporation intended to insist in future on a 16 feet clearway it was incumbent on them to disclose that intention in the terms of the draft concession.

" 4. In regard to this last contention the Committee need only say that in their opinion it is perfectly futile to raise a question of this kind, as both the Corporation and the Company are bound by the specific terms of the agreement, entered into between them, and neither could now argue that this or that matter was or was not in contemplation when the business was arranged.

" 5. With regard to the Company's claim to be repaid any moneys spent by them on street alterations in the event of the Corporation acquiring the Tramways, the Committee beg to point out that, that is a matter to be decided when the time comes, under the agreement in force

" 6. As to the hardship of the General Rule for a 16 feet clearway, the Committee have carefully considered the arguments advanced by the Company, and though not prepared to recommend that the rule be altogether abrogated,

they are of opinion that the particular extensions which are at present under consideration are of such importance to the development of the City, that, considering the question from the point of view put forward by the Company, the strict application of the rule need not be pressed for in their case, and that it should be held sufficient if a 12 feet carriage roadway on each side of the tramway is required, as laid down in Corporation Resolution No. 2224, dated the 25th March, 1891.

" 7. The Committee have, in consultation with the Commissioner and with Mr. Rimington, Managing Director of The Bombay Electric Supply and Tramways Company, carefully reconsidered each of the proposed extensions with special reference to the recommendation above made by them for a relaxation of the General Rule, and they beg to report in respect of them as follows :—

(1) *From Girgaum Road Terminus to Gowalia Tank.* Government have suggested that the construction of this extension might be deferred till the completion of the Improvement Trust's road between Chaupati and the top of Gowalia Tank Hill, which will take most of the carriage traffic that now goes over the route of the proposed extension. The Commissioner in the Report submitted by him to the Committee in compliance with para 2 of Corporation Resolution No. 147, dated 9th April, 1906, concurs in this suggestion. The Committee are of opinion that both Scheme No. III and Scheme No. IV of the City Improvement Trust will have an important bearing on this extension, which should therefore await their completion.

(2) *From Terminus in Grant Road westward to junction with proposed Extension No. 1.* Since Extension No. 1 will not be constructed for the present, there will be no junction with it, and the Committee are of opinion that this line should end at the Fire Brigade Station on Gowalia Tank Road.

(3) *From Falkland Road Terminus over the Bridge to Tardeo Road.*

(4) *From Jacob's Circle along Arthur Road.* There is no objection to these extensions.

(5) *From Parel (Tram) Terminus along Suparibag Road to Elphinstone Road.* This is a very necessary extension and should be sanctioned. It will greatly help the development of the City towards the North.

(6) *From Charni Road Station to Byculla Bridge via Kamathipura Foras Road.* This is also approved by the Committee subject to the condition previously laid down that the terminus should be at the existing Tram Terminus at Girgaum. Mr. Rimington has informed the Committee that his Company do not at present want to extend west of the Girgaum Terminus towards the Charni Road Railway Station.

(7) *From Mumbadevi along Girgaum Back Road to Charni Road.* This is still under the Committee's consideration and a further report will be hereafter made.

(8) *Colaba Causeway (Conversion from single to double).* From the Commissioner's report No 1980, dated the 23rd April, 1906, it will be seen that this extension has been proposed by a mistake, since a double track already exists along Colaba Causeway from Wellington Fountain to Grant Buildings."

On 30th July, 1906, the Government sanctioned the following extensions :—

" 1. From Parel Tram Terminus along Sopari Bag Road to Elphinstone Road.

" 2. From Girgaum to Byculla Bridge *via* Kamatipura, Foras Road.

" As regards Extension No 2, Government are of opinion that the proposal to take it to Charni Road Station should be further considered by the Corporation, whose attention should be specially called to the remarks made by the Commissioner of Police in his letter No 14091 G, dated the 30th November, 1905. When there are wedding ceremonies at the Allbless Bag the road is full of carriages, and tram cars will probably cause great inconvenience. The matter should again be discussed in the Corporation, and Government should be favoured with their remarks on the subject. Government understand that the Company do not themselves at present wish to make the extension to Charni Road Station. When they do, Government can reconsider the question."

On 23rd July, 1906, the Corporation passed the following Resolution :—

" No. 2110 That the Corporation resolves that the Municipal Commissioner should, before taking action under the provisions contained in Clauses 1A, 3, 4, 11, 14A, 14C, 14I, 16, 17 and 18D of the Agreement between The Bombay Electric Supply and Tramways Company, Limited, and the Municipal Corporation, lay before the Corporation the information at his disposal together with particulars of the course he proposes to adopt in each case."

Letter from the Municipal Commissioner, No. 18438, dated the 31st August, 1906, to the Corporation :—

" As required by Corporation Resolution No. 2110 of the 23rd July last, I have the honour to forward herewith for the approval of that Body a copy of the plan submitted by the Managing Director, Bombay Electric Supply and Tramways Co. Ltd., showing the proposed extension of the tramway from Girgaum Terminus to a point south of the Byculla Bridge.

" 2. It will be seen from the plan that the extension throughout will be a double track except in that portion of Charni Road extending from Girgaum Terminus to its junction with Girgaum Back Road where owing to the narrowness of the road at the latter point a single track is proposed. To avoid inconvenience to traffic it is preferable to have a double track and if all the set-backs on this portion of the road be acquired it will be possible to lay a double track.

" 3. If the Corporation consider that a double track should be laid on this length of the road also arrangements will be made to acquire the set-backs. It is, however, for the Corporation to decide whether the Tramway Company should be called upon to share the cost.

" 4. Along Balaram Street there are some set-backs and it is very desirable that they should be acquired. But in this case I do not think that the Company should be asked to share the cost.

" 5. At the junction of Bellasis Road and Foras Road it will be necessary to acquire the portion of the property shown in red on the plan in order to secure a curve of 60 feet radius. The acquisition of this and the lowering of the portion of the footpath at Bellasis Road will cost about Rs. 9,103. If the owner of the property is not agreeable to part with only the portion required for the purpose the whole of the property will have to be acquired and this will cost about Rs. 14,754. The Managing Director of the Company in his letter to me expresses his willingness to recommend to the Board to contribute to the cost of the acquisition; but as there is no set-back here I am of opinion that the Tramway Company should bear the whole cost.

" 6. In the plan are marked in pencil arrows the portions of tracks where the clear width between the outside of the car and the kerb of the road will be less than 12 feet and the orders of the Corporation are requested as to whether this variation of the prescribed width may be allowed.

" 7. *The yellow lines on the plan indicate the existing Municipal water mains running under the roads along which the tracks are proposed to be laid. The Company will have to take special precautions to guard against electrolysis or other injury to the mains which run close to the tracks.*

" 8. The Tramway Company will also have to avoid interfering with or injuring Municipal sewers and storm-water drains and to pay the cost of any diversions or other works necessary to protect them or to avoid interference with their cleaning, etc.

" 9. Subject to the conditions mentioned in paras. 7 and 8 and subject to the decision of the Corporation on matters referred to in paras. 3, 5 and 6, there is no objection to the proposed extension being sanctioned."

Letter from the Commissioner to the Corporation
No. 18732, dated the 4th September 1906 —

"As required by Corporation Resolution No 2110 of the 23rd July last, I have the honour to forward herewith for the approval of that Body a copy of the plan submitted by the Managing Director, Bombay Electric Supply and Tramways Company, Limited, showing the proposed extension of the Tramway along Soparibag Road from the Parel Terminus to a point little beyond the Elphinstone Cross Road

"2 It will be seen from the plan that the extension throughout will be a double track except in front of the Motarji Gokuldas Mill to the north of Jijibhai Dadabhai Lane, where owing to the narrowness of the road a single track is proposed. To avoid inconvenience to traffic it would be preferable to have a double track but the set back here consists of a portion of the Mill tank which is very deep and its acquisition would therefore be very costly. In the circumstances I think a single track here need not be objected to

"3 The Company propose to raise by about 7" the surface of the portion of the road indicated by letters A and B for a length of about 200 feet. So far as the Municipality is concerned there is no objection to such raising provided the Company hold themselves responsible for any claim for damages that may be preferred against the Municipality by the owners of private properties affected thereby and pay the Municipality all cost of raising and otherwise making good the remaining portion of the road and of raising and altering all iron covers, street boxes, hydrants, etc. that may be affected by the raising of the road

"4 In the plan are marked in pencil arrows the portions of the tracks where the clear width between the outside of the car and the kerb of the road will be less than 12 feet and the orders of the Corporation are requested as to whether this variation of the prescribed width may be allowed

"5 The yellow lines on the plan indicate the position of the existing Municipal water mains running under the roads along which the tracks are proposed to be laid. The Company will have to take special precautions to guard against electrolysis or other injury to the mains which run close to the tracks

"6 The Tramway Company will also have to avoid interfering with or injuring Municipal sewers and storm water drains and to pay the cost of any diversions or other works necessary to protect them or to avoid interference with their cleaning, etc

"7 Subject to the conditions mentioned in paras 3, 5 and 6 and subject also to the decision of the Corporation on the matter referred to in para 4 there is no objection to the proposed extension being sanctioned."

These letters were referred by the Corporation to the Tramways Committee by their Resolution No. 3543 of 6th September, 1906, who reported as follows :—

“ The Committee appointed by Corporation Resolution No. 5324, dated the 8th February, 1906, to report on certain Tramway Extensions, beg to report as follows with reference to Corporation Resolution No. 3543, dated the 6th September, 1906, which has referred to the Committee the matters under-mentioned :—

- (1) Proposed extension of the Tramway from Girgaum Terminus to a point south of the Byculla Bridge.
- (2) Proposed extension of the Tramway along Supari Bag Road from the Parel Terminus to a point a little beyond the Elphinstone Cross Road.

“2. The Committee, being fully familiar with the Streets through which the lines in question pass, have carefully examined the plans submitted by the Bombay Electric Supply and Tramways Company, Limited, and discussed them with the Commissioner and the Executive Engineer and have decided to move the following recommendations :—

“3. *Girgaum to Byculla Extension.*

“ The extension throughout is to be a double track, except between Girgaum Terminus and Girgaum Back Road. Between these points the track will be single except for a central passing place where the width of the road permits. The Committee approve of this arrangement, but desire that the Commissioner should be requested to remove the cab stand from its present position near the Girgaum Terminus and enforce all the set-backs that can be acquired from compounds along this section of the road as soon as possible at Municipal expense.

“ The Committee notice that the width of the road (Baram Street) immediately north of Grant Road is only 40 feet. They consider that at this point the road should be widened at Municipal expense by the acquisition of the set-back to the east, which is a portion of a compound.

“ The next point where a deficiency in width occurs is where the corner of a Municipal Dharamsala projects into Baram Street. The Committee consider that this local obstacle may be disregarded for the present.

“ The width of the road followed by the Tramway track is sufficiently wide from this point until we reach Kamathipura 14th Street. From thence into Bellasis Road widening is

necessary and the Committee recommend that as previously arranged the construction of this extension shall be made conditional on this portion of the road being widened to the required width at the cost of the Company.

" The next deficiency in width is met with in Clare Road and this the Committee consider may safely be ignored especially in consideration of the great width of the pavements on either side of the road and the fact that these are largely utilised by foot passengers.

Subject to these remarks the Committee recommend that the extension be sanctioned.

" 4. *Sopari Bag Road Extension.*

" The Commissioner's proposals in regard to this line are approved by the Committee subject to the recommendation that the Commissioner be asked to acquire at Municipal expense such obstructions to the line as may be acquired under Section 299 of the Municipal Act, and also to the set-back of the shop on the west side of the road slightly north of the present Parel Tram Terminus."

This Report was approved and adopted by the Corporation under Resolution No. 4575 on 11th October, 1906.

During this year, the Municipality paid Rs. 47,000 for the cost of the acquisition of a set-back, to the owner of the house at the junction of Masjid Bunder Road and Abdul Rehman Street. This set-back was for the benefit of the working of the tramway at that junction. The Company, therefore, offered to pay compensation to the Municipality towards the cost of the acquisition and suggested the following two alternative ways :—

(1) *Payment of a lump sum of Rs. 10,000 subject to the condition that in the event of the Municipality hereafter exercising its option of buying the Tramways under the terms of the Concession of the Company, dated 7th August, 1905, this payment of Rs. 10,000 shall be then added to the amount of the purchase money payable by the Corporation for the acquisition of the Tramway undertaking.*

(2) *Annual payment of Rs. 400 (i.e. interest on Rs. 10,000 at 4 per cent per annum for such period as the Tramways remain in the possession of the Company.*

As the Tramways Committee was of opinion that the first alternative was preferable and recommended its acceptance, the Corporation adopted it by their Resolution No. 808 of 6th May, 1907.

The following four extensions were then carried out and opened for traffic on the dates mentioned against them :—

Sections.		Date of Opening.	Route Mileage.
1. Lamington Road (Gilder Street) to Tardeo Terminus.	April	1907	0.300
2. Lal Bag to Parel Terminus	August	1907	0.958
3. Girgaum to Byculla Bridge	November	1907	1.720
4. Alignment of entrance tracks to Company's Tardeo Depot	November	1907	0.417

The last extension though carried out in November, 1907, was sanctioned by the Corporation under their Resolution No. 7379 of 20th February 1908.

2. Parel Terminus to Dadar.

On the 30th July 1914, the Company applied to the Municipal Commissioner for sanction of the Corporation and approval of the Government to "a proposed extension of our tramway lines from our present Parel Terminus along Kingsway to a point about 450 yards north of Naigaum Cross Road where a new road running east and west is in course of construction, on which our tracks will be laid into our proposed new Kingsway Tramway Depot and Workshops." A copy of this letter was sent to the Chairman, Bombay Improvement Trust.

This was approved by the Corporation (Resolution No. 3974 of 21st September 1916) and sanctioned by Government under G. O. No. 8086 General Department of 2nd December 1916.

This extension 1.200 miles in length was opned for traffic on the 5th June, 1917.

3. Extension of Tramway Lines along :

- (1) *Sandhurst Road.*
- (2) *Esplanade Road.*
- (3) *Doubling of Single Track at Colaba and*
- (4) *Opera House Road.*

On 23rd February, 1914, the Company applied to the Municipal Commissioner for an extension of tramway lines along Sandhurst Road from its junction with Frere Road to its junction with Falkland Road in the following terms :—

" We have the honour to forward herewith six blue prints (No. B 2682) of Route Plan No. 22, showing the proposed extension of our tramway lines along Sandhurst Road from its junction with Frere Road to its junction with Falkland Road, and connecting with our existing tramway lines in both these streets

" We have the honour to apply for Municipal sanction and for the approval of Government to this extension of the tramway.

" The laying of these new lines cannot be carried out until the reconstruction of the Elphinstone Bridge is completed, but as we understand that this work will be finished in course of this year we apply for the necessary sanction now in order that delay in commencing the extension may be avoided when that work is completed

" With regard to the question of fares we propose, subject to the approval of the Corporation, that the fare to or from any point on the new line to or from any point on our now existing tramway lines shall be one anna. Our application to make the extension is conditional upon this tariff of fares being sanctioned "

The Commissioner in his letter of 11th August, 1914, agreed to recommend the proposal to the Corporation for sanction.

The matter was, however, shelved and no action taken till 1916.

On 29th September, 1916, the following letter regarding the first three of the above extensions was addressed to the Municipal Commissioner by the Managing Director —

" *Extension of the Tramway System.* I have the honour to apply for the sanction of the Corporation and the approval

of Government to the following extensions of and alterations to our tramway lines :—

“(1) *An extension along the Sandhurst Road from Frere Road via the Elphinstone Bridge, to a terminus at the junction of Sandhurst Road with Breach Candy and Girgaum Roads.*

“(2) *An extension along the Esplanade from a point on our lines a little south of the Flora Fountain to a junction with our Girgaum Road line opposite to the Framji Cowasji Institute.*

“(3) *The doubling of our present single track along Colaba Road from a point opposite the Cotton Green to the first-level crossing of the B. B. & C. I. Railway.”*

The matter as usual went to the Tramways Committee for report. The Committee were of opinion that these extensions were very desirable and recommended them for approval. The Committee also approved a fourth extension to those mentioned above, viz., the extension of tramway lines along Girgaum Road so as to form a terminal siding in place of the existing tramway siding in Charni Road as this was also referred to them by the Corporation Resolution No. 8211 of 22nd March 1917. This extension was suggested to the Tramways Committee as the existing siding interfered with the traffic along Charni Road and the Company had agreed to this proposal.

All these extensions were thereafter approved by the Corporation under Resolution No. 2362 of 12th July, 1917, and sanctioned by Government on the following dates :—

1. Sandhurst Road under G.O. No. 949 G.D. of 6th February, 1918.
2. Doubling the track at Colaba under G.O. No. 949 G.D. of 6th February, 1918.
3. Esplanade Road under G.O. No. 3880 G.D. of 9th May, 1919.
4. Opera House Road under G.O. No. 2007 G.D. of 15th March, 1918.

The extensions were opened for traffic on the following dates :—

- | | | |
|----------------------|--------------------|--|
| 1. Opera House Road. | ·179 route mile. | January 1919. |
| 2. Esplanade Road. | ·840 route mile. | 1st December 1919. |
| 3. Sandhurst Road. | 1·762 route miles. | Work started on 6th December 1919.
Opened on 12th April 1920. |

Sections opened :

- | | | |
|----------------------------|----|--------------------|
| Frere Road to Bhendy Bazar | .. | 2nd February 1920. |
| Frere Road to Gol Pitha | .. | 1st March 1920. |
| Frere Road to Opera House | .. | 12th April 1920. |

4. Frere Road Terminus to Victoria Road Overbridge.

The Managing Engineer by his letter of 31st January, 1920, applied to the Executive Engineer of the Bombay Municipality for the permission of the Corporation and the sanction of Government to the construction of the above extension.

This was approved of by Corporation Resolution No. 1429 of 13th May, 1920, and sanctioned by Government under G. O. No. 7165 G. D. of 6th July, 1920.

This route—1·135 miles—was opened on 20th April, 1921.

5. Victoria Road Overbridge to the Cotton Depot.

The construction of the new Cotton Depot at Sewree was being pushed forward in the early months of 1921 and it was expected that the Depot would be completed and ready to accommodate the trade by September 1923. The Chairman of the Bombay Port Trust considered it essential that early consideration should be given to the scheme for extending the tramway over Victoria Road Overbridge and along Messent Road so as to provide easy means of communication with the Cotton and Grain Depots. He therefore requested the Company on 23rd March, 1921, that this extension might be treated as an urgent requirement and early steps taken to put it in hand. The East India Cotton Association (the body who control the cotton trade of Bombay) were also much concerned regarding communications to and from the new Depot. When the proposal was first under consideration, the extension proposed was along Victoria Road, across the Overbridge and along Messent Road. It was considered that this extension could be laid more expeditiously than one along Reay Road. It appeared that the latter extension was desired by the great majority of the Trade and that they would not be satisfied by the former. It was, therefore, decided to extend northwards the existing tram terminus in Reay Road as far as the north entrance to the Cotton Depot.

The following letter was accordingly addressed to the Company by the Deputy Chairman of the Bombay Port Trust on the 19th July, 1923 :—

" Tramway Extension along Reay Road to New Cotton Depot, Mazagon. I am directed to invite reference to my D. O. letter No. 5222 of the 10th instant and your reply No. 8512/23 of the 12th instant on the above question, and to say that, subject to the sanction of Government and to acceptance of the conditions by your Board, the Trustees have approved the following proposals for construction of an extension of the tramway line along Reay Road as far as the north entrance to the Cotton Depot (vide litho plan already furnished to you) to meet the requirements of the Cotton Trade :—

- (1) The Trustees will advance to your Company such sum, not exceeding Rs. 5 lakhs, as is necessary to cover the cost of the extension. The Company will furnish the Trustees with an estimate of cost of the extension and the Trustees will deposit the necessary funds as and when required by your Company to carry out the work.
- (2) The advance shall be repayable within a maximum period of 5 years.
- (3) No interest shall be payable by the Company for the first 3 years, unless, with the sanction of the Municipal Corporation, a satisfactory general revision of tram fares is possible at an earlier date, in which case the Company will pay to the Trustees interest on the advance at the rate of 5 per cent per annum from the date such revision takes effect; in the event of the Company's demands being sanctioned only in a modified form by the Municipal Corporation the Trustees will look to your Board to pay a proportionate rate of interest on the advance. If the advance shall not have been repaid within 3 years the Company shall pay to the Trustees interest at the rate of 5 per cent per annum on the balance outstanding for the remainder of the period, up to date of final repayment, within the maximum period of 5 years above stated.
- (4) Until date of final repayment of the above advance the Trustees shall hold a lien on the materials comprised in the extension, as security for the monies advanced by them.
- (5) The Trustees will undertake :—
 - (a) To render the Company every assistance in obtaining quick sanctions from the Corporation and from Government;

- (b) To ensure that the area to be occupied by the tracks is handed over clear of all obstructions such as manholes, gas, and water mains, etc., so that the tracks can be laid on their final alignment.
 - (c) To allow your Company to lay two traction feeder cables under the level crossing adjacent to your Kussara Power Station and to give you all facilities for doing so rapidly.
 - (d) To arrange that space will be made available to park tram cars in the vicinity of the Cotton Green, ready to handle the southbound traffic and to lay if necessary 3 tracks for a distance of say 150 yards).
 - (e) To arrange for the early removal of any obstructing telegraph and telephone wires.
 - (f) To support the Company in asking permission to lay their rails on a concrete bed and to fill up between the rails temporarily with water bound macadam, which will be replaced without delay with stone setts as required by the Municipality.
- (6) These conditions shall be embodied in a formal agreement to be entered into between your Company and the Trustees, the cost of such agreement to be borne by the Trustees

"It is understood that subject to approval of the above conditions you will endeavour to lay and open the extension for traffic within 3 months of being granted final permission to proceed with the work and that if any unforeseen delays occur, you will be willing to lay crossovers as necessary and to open portions of the line as soon as available for traffic.

"I am to request that you will advise me as early as possible of the decision of your Board in this matter. In the meanwhile the urgent sanction of Government to the advance has been applied for. It is hoped that Government will sanction the proposals without requiring a formal amendment of the Port Trust Act, which would involve a certain amount of delay. I will acquaint you with the decision of Government immediately orders are received.

"As you are aware, it is very desirable in the interest of all concerned that the extension should be pushed through with the utmost possible expedition and I am therefore to request that, in anticipation of the formal sanction of Government, you will be good enough to proceed with such preliminaries in the nature of plan and estimates as may be practicable. The Trustees' Chief Engineer has been requested to collaborate with your Engineers and to afford them every possible assistance and it is requested that you should communicate direct with him as regards any technical engineering details."

On 24th July, 1923, the Port Trust informed us that they had obtained the sanction of Government to their proposal re : financing the cost of the above extension.

With the approval of the Board, the Company accepted the conditions set out by the Bombay Port Trust; exception was however taken to condition No. 4, as the terms of the Trust Deed securing the Company's issue of Debentures would thereby be infringed. The General Manager suggested that in place of such a lien, the Company would pass to the Trustees of the Bombay Port a pro-note covering the sum advanced (27-7-1923). Government to whom the matter was referred by the Bombay Port Trust, could not agree to waive the condition of lien in accordance with the provisions of the Port Trust Act. The Trust suggested that the difficulty could be overcome by obtaining the consent of the gentlemen who acted as Trustees for the Company's Debenture Holders, as the extent of the lien would be limited to the amount of such advance as the Port Trust might be required to make to the Company for the purposes of the extension (7-9-1923). What happened thereafter will be apparent from the following letter addressed to us by the Deputy Chairman, Bombay Port Trust, on the 2nd November, 1923 :—

" Reay Road Extension. With reference to your conversation with me on the 29th ultimo, I understand that your Board are unwilling to execute the draft agreement forwarded for approval under my letter No. 7759 dated 24th October, 1923, relative to financing the Reay Road extension, but that they would prefer to endorse and deposit with the Trustees, as security for the lien required by the latter, Government Bonds to the value of the amount to be advanced by the Trustees for the capital cost of the extension.

" I am to say that the exact form in which the Trustees' lien is secured is immaterial so long as the arrangement does not conflict with the provisions of the Port Trust Act. The Trustees are therefore willing to accept your Board's proposal.

" It is understood that on receiving payment of the cost of the extension you will deposit with the Trustees' Chief Accountant the relative Bonds duly endorsed in favour of 'the Trustees of the Port of Bombay or order'. The Trustees' Chief Accountant will collect and remit you the interest on the securities as it falls due. On repayment of the advance the securities will be re-endorsed and returned to you; if the advance is repaid by instalments a proportionate amount of the securities will be re-endorsed and returned on receipt of each instalment.

" The conditions as regards payment of interest on the advance and repayment of the principal will be as detailed in

my letter No. 5503, dated 19th July, 1923, and accepted under your No. 9256, dated 27th idem

"I shall be glad if you will kindly confirm the above arrangements."

The General Manager, after accepting the conditions offered by the Bombay Port Trust in their letter of 19th July, 1923, addressed the following letter to the Municipal Commissioner on 27th July, 1923 :—

"Tramway Extension, Reay Road I have the honour to request that the very earliest consideration may be given to this application, of extreme importance to a very large section of the Commercial Communities of this City

"2. My Board have been approached by the Trustees of the Bombay Port Trust, who have pointed out the extreme urgency for an extension of the Tramway System to the new Cotton Depot at Mazagon. My Board, as you know, have recently been unable to consider any extensions of their system, pending a decision by the Corporation in regard to their application for an enhancement of tram fares and supply tariff. This decision was communicated to the Trustees, who have now requested my Board to reconsider their decision in this very special case, and at the same time have offered to defray temporarily the expenditure incurred by this Company. In view of the extreme urgency of the case and the vital necessity, in the public interest, for making such an extension, my Board have directed me to apply to you for the necessary sanctions, but in doing so to point out that such an application can neither be regarded by them as a precedent, nor as a departure from their policy above referred to, and that the application is made only under the special circumstances of this particular case."

The Municipal Corporation approved the extension under their Resolution No. 4122 of 9th August, 1923. This was sanctioned by Government on 18th October, 1923 (No. 4825).

The work of laying the lines was commenced on 24th August, 1923, in anticipation of approval of the Corporation and sanction by Government and the service—0·883 mile in length—was opened for traffic on 22nd October, 1923.

The amounts advanced by the Port Trust against our deposit of Government Paper as security were as follows :—

			Rs.
3rd December	1923	..	2,50,000
7th February	1924	..	40,000
17th July	1924	..	75,000
			--
		Rs.	3,65,000

This amount was paid to the Bombay Port Trust by the Company in three instalments of Rs. 2,50,000, Rs. 40,000 and Rs. 75,000 respectively on their due dates, namely, 3rd December 1926, 7th February 1927 and 16th July 1927.

6. Grant Road to Gowalia Tank.

The question of extending the Tramway from Girgaum Road Terminus to Gowalia Tank was raised in 1905. The Company proposed eight extensions, of which that to Gowalia Tank was No. 1. The Municipal Corporation, by Resolution No. 2963, dated 25th September 1905, approved the Extension "subject to the condition that the terminus should be at the junction of Gowalia Tank and Grant Roads opposite the Fire Brigade Station."

In view of the improvement works in the vicinity being scheduled, the matter was further considered in 1906, and by Resolution No. 1776, dated the 5th July, 1906, the Municipal Corporation approved and adopted the First Report of the *Committee of the Corporation regarding Tramway Extensions which contained the following reference to the Gowalia Tank Line* :--

"From Girgaum Road Terminus to Gowalia Tank. Government have suggested that the construction of this extension might be deferred till the completion of the Improvement Trust's Road between Chaupatti and the top of Gowalia Tank Hill, which will take most of the carriage traffic that now goes over the route of the proposed extension. The Commissioner in the Report submitted by him to the Committee in compliance with para. 2 of the Corporation Resolution No. 147, dated 9th April, 1906, concurs in this suggestion. The Committee are of opinion that both Scheme No. III and Scheme No. IV of the City Improvement Trust will have an important bearing on this extension, which should therefore await their completion."

The question remained in abeyance until October 1907, when the Company applied to the Municipality for a revised lay-out.

For various reasons, chief amongst them the need for strengthening Frere Bridge and the War, nothing was done until 1919, when the Company submitted proposals for an

extension as far as the N. M. Petit Statue in the following letters :—

Letter No. 7295/19, dated 15th July 1919, from the B. E. S. & T. Company to the Municipal Commissioner for the City of Bombay :—

" Grant Road Extension. By Municipal Commissioner's letter No. G. 15640 of 11th March 1908 the permanent-way portion of this extension was sanctioned as shown in red to the Gowalia Tank Fire Brigade Station, suggested alterations have however been made in the sanctioned pole positions, the permission now asked for covers the remainder of the extension and the revised pole positions on the portion originally sanctioned. It has been impossible to carry out this work earlier, owing to the state of the Frere Bridge, which, I understand, is now about to be strengthened. This extension will provide a much needed transportation facility, rendering the Tramway Service more accessible to the Gamdevi Estate and Cumballa Hill. I trust that the Corporation will see their way to approve of the proposed loop at the terminus near the N. M. Petit Statue. If this is sanctioned it will be possible to run Trailer Cars from the Fort and other districts along Grant Road to the new terminus, thus helping materially the problem of handling dense traffic in that locality. The extension will be double track throughout."

The necessary sanction of the Municipal Corporation and Government was given.

By this time the high cost of constructional and operating expenses had made the construction of the extension financially impracticable. The Company therefore decided not to proceed with it.

Commencing on February 8th, 1922, continuous pressure was brought to bear on the Company to construct this extension in the public interest and for the convenience of the Municipal Corporation. The Frere Bridge at Grant Road was being reconstructed and the Company was pressed to lay its lines over the bridge in order to avoid a subsequent disturbance of the road surface. Afterwards, as the Municipal Corporation was reconstructing the Gowalia Tank Road, it pressed the Company to lay its lines on the road. The Company was not willing to accede to either of these proposals. The high constructional and operating charges made all extensions unprofitable. Without a general revision of fares all extensions induced a heavy financial loss. The Company finally gave way, and constructed the extension, to its certain financial

disadvantage and solely to meet the needs of the Municipal Corporation.

The work was put in hand and completed on 10th April 1924. It was, however, not opened to traffic immediately, as no agreement had been reached in regard to the fares to be charged.

This extension—0.545 mile in length—was opened for traffic on 11th February 1926.

7. Bori Bunder to Parel Road (Bhendi Bazaar).

The Company applied to the Municipal Commissioner on 16th May, 1929, for the approval of the Corporation and the sanction of Government to the construction of this extension. The General Manager wrote as follows :—

“ We have the honour to apply for the early approval of the Municipal Corporation and the sanction of Government, to the construction of the proposed Sydenham Road Tramway Extension, as shown on our Route Plan No. B. 7838, six copies of which are sent to you herewith.

“ *General.* We do not think that we need stress the improvement that the construction of this chord line will make in the working of our tramway service. By its use the duration of a journey from Bori Bunder to the north of the Island will be materially lessened, as the devious journey through Cruickshank Road, Money School, Kalbadevi and Pydhowni will be obviated. The construction of this extension will make available a direct route from Bori Bunder *via* Hornby Road, along Palton Road, across Carnac Road into Sydenham Road, thence into Parel Road (Bhendi Bazaar) just south of our present Sandhurst-Parel Junction.

“ *Fares.* (a) During the recent negotiations between this Company and the Municipal Corporation, regarding the fares to be charged on tramway extensions, it was agreed that the Sydenham Road Extension, if and when constructed, should be considered as forming part of the Tramway System as it existed in 1905. Consequently no question of an enhanced fare arises in this case.

“ (b) But, in view of the terms of Clause 15 of the Deed of Concession, dated the 7th August, 1905, under which the fares to be charged on extensions made since 1905 are subject to the approval of the Municipal Corporation, the formal

sanction of that body to a fare of one anna being charged on the Sydenham Road Extension, between the limits of Parel Road and Hornby Road is necessary, and we have the honour to request that this approval may be accorded.

"(c) Our application for permission to construct this extension is therefore made, subject to the approval by the Municipal Corporation of this fare, which will of course cover a journey from any point on the Sydenham Road Extension to any other point on the system as it existed in 1905 and *vice versa*. (In this connection, we have the honour to refer you to paragraph 4 of the First Report of the Tramways and Telephone Committee, regarding the question of fares to be levied by the Tramway Company, dated 14th March 1927.)"

The matter was referred to the Tramways Committee who recommended the Corporation on 12th August, 1929, to sanction the proposal. The Corporation, however, referred the matter back to the Tramways Committee on 26th September, 1929, with a request to enquire of the Company "and report whether in consideration of the short length of the extension they (the Company) will not be prepared to charge half anna fare only instead of one anna and whether when the revised fares are levied by the Company, this extension will not be considered as a part of the old Tramway System".

The Company's views were asked for on the points raised in the above resolution. The General Manager by his letter of 29th October, 1929, wrote as follows :-

" Sydenham Road, Proposed Tramway Extension.

" We have the honour to acknowledge receipt of your letter No 6710 of the 26th instant, and in reply to refer you to paras 4 and 5 of the ' First Report of the Tramways and Telephone Committee regarding the question of fares to be levied by the Tramways Company ', dated 14th March 1927.

" You will see therein that we have undertaken to treat the proposed Sydenham Road Extension, as merged in the Tramways System as it existed in 1905. The fare to be charged thereon must therefore necessarily be governed by the fares in force on the system as it existed in 1905, to which no exception is feasible.

" In respect of the fares on extensions made since as sanctioned by the Corporation in December 1928, this proposed Sydenham Road Extension will be treated as forming part of the old system, as it existed in 1905."

Eventually the Corporation sanctioned the Company's proposal under the Resolution No. 11011 of 10th March, 1930,

subject to the confirmation by Government and to the conditions mentioned in our letter of 16th May 1929 and subject further to the undertaking that a fare of one anna be charged by the Company on the proposed extension between the limits of Parel Road and Hornby Road.

Government by their Resolution No. 669/29 of 20th June 1930 (P.W.D.) confirmed the above permission granted by the Municipal Corporation.

This route—0.968 mile in length—was opened for traffic from 1st March 1931.

8. Abdul Rehman Street, Nagdevi Street and Sydenham Road.

When the proposal regarding Sydenham Road Extension was referred by the Municipal Commissioner under Section 293 of the Municipal Act to Government for approval, the latter referred it to the Police Commissioner who remarked as follows (13-5-1930) :—

“ With reference to your letter No. E. G/34/A of the 16th ultimo to the Secretary to Government, P.W.D., on the subject of the extension of the tramway system along Sydenham Road, I have the honour to state that when the tramway system is extended to Sydenham Road we shall have trams running on 3 parallel streets very close to each other, viz., Abdul Rehman Street, Nagdevi Street and Sydenham Road. To my mind Abdul Rehman Street is quite unfit to have a tram track running through it and would suggest that when the Sydenham Road track is laid, the Abdul Rehman Street track should be taken up.”

Our reply to this was contained in our letter addressed to the Executive Engineer, Municipality, on 30th May 1930, as under :—

“ We have the honour to inform you that the Tramway Services from the South of the Island to Gowalia Tank, Grant Road and Tardeo run through Abdul Rehman Street on the up journey only. On the down journey they go via Nagdevi Street, whereas the services along Sydenham Avenue will be run from the North of the Island. We regret therefore being unable to remove this track as requested.”

The City Engineer wrote to the Company in this connection on the 4th February 1931 as follows :—

“ I have the honour to refer to the correspondence ending with your letter No. 8067/30, dated 30th May 1930, in connec-

tion with the tramway extension along Sydenham Road in which you regretted your inability to remove the tram tracks from Abdul Rehman Street on completion of the tramway system along Sydenham Road. When the Sydenham Road tram service is completed there would be in three streets— Abdul Rehman Street, Nagdevi Street and Sydenham Road — tramway tracks running parallel in close proximity to one another. You are well aware that Nagdevi and Abdul Rehman Streets are very congested and narrow streets where it is difficult for traffic to get through. Your service from the south of the Island to Gowalia Tank Road, Grant Road and Tardeo, now fed through Abdul Rehman Street and *vice versa* through Nagdevi Street, can be easily maintained and continued by a connection from the Sydenham Road service through Masjid Bunder Road to the Abdul Rehman Street service at Pydhowni. There would be very little difficulty in doing this and the travelling public will not be in the least inconvenienced. On the contrary great benefit will result in increasing the traffic facilities through Nagdevi and Abdul Rehman Streets by the lifting of the tracks without in any way affecting your revenue or your service.

“ I forward herewith for your information a copy of the minutes of the Traffic Committee which considered this question of lifting the tramway track through Abdul Rehman Street. I request your earnest consideration of the points raised in this letter, and request an early reply to enable me to place the matter before the Tramways Committee ”

Minutes of the Meeting of the Traffic Committee, Bombay, held in the office of the Police Commissioner on 24th September 1930 :—

“ Resolution No 5 As requested by the Municipal Commissioner in his letter No E. G. 34 A, dated 12th July 1930, the traffic Committee considered the question of lifting the tramway track in Abdul Rehman Street on the completion of the Sydenham Road tramway track. Mr Koddan of the Municipality informed the Committee that the Municipality together with the Tramway Company were now considering the question of lifting the tracks both in the Abdul Rehman Street and also Nagdevi Street. He said that in his opinion tramway tracks should never have been laid in either of these narrow streets and that the obstruction caused was very great. It was now proposed that north bound traffic to Gowalia Tank Road should take off from Sydenham Road on Masjid Bunder Road and proceed *via* the north of Abdul Rehman Street through Babu Khote Street to Gowalia Tank Road as at present. He intimated that the only objection to this new lay-out would be the high cost of acquiring certain buildings which would have to be demolished at the corner of Masjid

Bunder Road. The Members of the Committee considered that they were not concerned with this matter, but on purely traffic grounds were unanimous in supporting the proposal that tram tracks should be removed from both the Nagdevi and Abdul Rehman Streets."

The General Manager, while regretting his inability to accede to the wishes of the Traffic Committee, wrote as follows to the City Engineer on 23rd February 1931 :—

" In reply to your letter No. E.G./34/A of the 4th instant, we have the honour to say that were our tracks in the greater portion of Abdul Rehman Street and Nagdevi Street to be removed, it would still be necessary to maintain tramway tracks at the north end of the former street to work tram cars from Sydenham Road along the projected new tracks in Musjid Bunder Road, to Pydhowni, and thence to Grant Road and Tardeo.

" The track at the north end of Abdul Rehman Street is for a short distance single ; this is consequently a seriously congested section which would have to be doubled ; we make that an essential condition. At the moment certain properties have not been acquired. We understand the suggestion is that we shall be allowed to double our track, and that other vehicular north bound traffic will be diverted along the western end of Musjid Bunder Road to Pydhowni, thus closing the north end of Abdul Rehman Street thereto, and rendering it possible for us to work this double track, despite the small clearance that would exist between our north bound tram cars and the property still to be acquired.

" Provided the above arrangement is authorised we could lay the new track in Musjid Bunder Road from Sydenham Road, but the cost would amount to about Rs. 55,000. In addition we would have to remove and write off our books the value of the tracks in Abdul Rehman and Nagdevi Streets, which would involve an estimated further charge of about Rs. 54,000 ; the cost of permanent reinstatement is not included, and would have to be borne by the Municipality.

" We would not suggest removing any of our tracks in the vicinity of Crawford Market to the south of Carnac Road line. They (including the present Crawford Market Siding) would remain in position, and be used on occasion as necessary.

" Whilst anxious to meet the wishes of the Traffic Committee, we must point out that the proposed arrangement would seriously reduce the traffic facilities now enjoyed by a considerable section of the public. A very large number of people use the cars to reach the main entrance to Crawford Market and the busy shops between the Market and the Hornby-Palton Junction. *It is true that these people would be*

served by the Palton Road tramway service, but even a short walk in the hot weather and the monsoon is a considerable hardship. We suggest therefore that this consideration be weighed by the Traffic Committee.

" We also invite attention to the widening, which has already substantially progressed in Abdul Rehman Street. We consider that this street is such a busy centre that, when the widening has been completed, a tramway service therein may be imperatively demanded.

" The total cost in which we should be involved would amount approximately to about say Rs 1,10,000. We should gain no additional revenue from this expenditure, but we should derive the advantage of a clearer, though slightly longer, run for our Grant Road and Tardeo tram cars. The cash saving to be realised would be quite negligible.

" To sum up, we regret we cannot recommend our Board at the present time, when financial conditions are so difficult, to incur this substantial expenditure, when no marked compensating increase in revenue is visible."

The Municipal Commissioner addressed the Corporation on 6th May 1931 in the following terms and these were approved by the Tramways Committee in their meeting held on 25th June 1931 :—

" I have the honour to refer to Corporation Resolution No. 11011 of 10th March 1930 according approval to the proposal of The Bombay Electric Supply and Tramways Company to lay tram lines in the Sydenham Avenue along Palton Road connecting with the Hornby Road lines and to state that Government while confirming the proposal endorsed the view of the Commissioner of Police that the B. E. S. & T. Company should be called upon to lift the tracks from Abdul Rehman Street after opening the new extension. The General Manager, B. E. S. & T. Company, on being consulted on the point expressed his inability to do so as they afforded direct route to Grant Road and Tardeo Section from Fort. The Traffic Committee to whom a simultaneous reference was made supported the view of the Commissioner of Police. The City Engineer while communicating this recommendation of the Traffic Committee to the B. E. S. & T. Company, under his letter No. E.G./34/A of 4th February 1931, made a suggestion for laying a double track along Masjid Bunder Road so as to connect the Sydenham Road tramway lines with the existing single track in the north portion of Abdul Rehman Street so that the direct service to Grant Road and Tardeo can be maintained and at the same time the parallel lines in the southern portion of Abdul Rehman Street and in the Nagdevi Street can be removed. The General Manager, B. E. S. & T. Company, whilst anxious to comply with the recommendations of the Traffic Committee and the Police Commissioner, points

out in his letter of 23rd February 1931 the difficulty of meeting the heavy estimated cost of Rs 55,000 for laying the connection in Musjid Bunder Road from which there was no chance of additional revenue. He further points out that the existing traffic facilities enjoyed by the passengers would be considerably reduced and that the writing off the book value of the tracks in Abdul Rehman Street would involve a further charge of Rs. 54,000 which is exclusive of the cost of reinstatement of the road surface after the rails are lifted and states that the cost of restoring the road surface will have to be borne by the Municipality.

"I agree that Abdul Rehman Street and Nagdevi Street are too narrow in width for running tram cars through them in these days of growing motor transport and that after the opening of the Sydenham service the tram lines through these streets should be lifted as it is inadvisable to run tram services in three parallel streets in close proximity. As, however, it is difficult in the present financial stringency to find funds to meet the heavy expenditure involved in the proposal, I suggest that the matter may be deferred till financial conditions improve. If the Corporation agree with this suggestion I will inform the Commissioner of Police accordingly."

Paragraph 5 of the Minutes of the Meeting of the Traffic Committee held on 17th November 1931 contained the following on the subject. It was sent to us by the City Engineer with his letter of 3rd February 1932 : --

5 " *Extension of Tramway System along Sydenham Road.* The replies received from the Municipal Commissioner and The Bombay Electric Supply and Tramways Co were read. As the Committee had previously recommended the removal of the trams from Abdul Rehman Street and Nagdevi Street they expressed disappointment at the inability of The B.E.S & T Company to assist, at the same time appreciating the difficulties involved. It was suggested, however, that some congestion might be lessened by removing the tracks from Nagdevi Street and running tram south bound *via* Mahomed Ali Road and it was resolved that this suggestion be recommended."

The General Manager replied to this letter on 29th March 1932 as follows :—

"With further reference to your letter No C. E. 80/A of the 3rd of February and to your reminder of the 17th of March, we have the honour to say that we extremely regret the long delay in replying, but this has been due to the absence of the undersigned from office owing to illness.

"We have now had the opportunity to consider paragraph 5 of the Minutes of the Meeting of the Traffic Committee held on the 17th of November last at the Head Police Office,

Bombay, wherein it was suggested that some congestion might be lessened by removing the track from Nagdevi Street, and running the south bound trains *via* Mahomedali Road and Musjid Bunder Road. We note that this suggestion was recommended by that Committee, and you ask for our views in the matter before placing the same before the Tramways and Telephone Committee of the Corporation.

‘ That suggestion has several advantages over that previously put forward, as to which we wrote to you in our letter No. 2708/31 of the 23rd of February 1931. Under it the traffic facilities now enjoyed by a considerable section of the tram travelling public would not be reduced. ’

“ But there will be two serious disadvantages if this alternation is made :—

(1) The more alternative routes we have for working traffic through the bazaar the better from the point of view of the travelling public. The experience of the past few years has intensified the importance of this point

(2) Passengers visiting shops, etc., in Abdul Rehman Street, and desiring to journey by tram to the Fort, now complain frequently of the hardship involved in having to walk from Abdul Rehman Street to Nagdevi Street, in order to board a south bound car. Their objections would be increased materially, were they to have to walk to Mahomedali Road.

“ A further but lesser disadvantage is that Nagdevi Street is a busy shopping centre, whereas Mahomedali Road at present is not. The latter route would not therefore be so convenient as the former to many of our passengers

“ The estimated cost of linking the present track in Musjid Bunder Road with the down track in Mahomedali Road, and further of linking the down track in Mahomedali Road with the down track in Carnac Road would amount to approximately Rs. 39,500. In addition it would be necessary for us to remove and to write off our books approximately 2,000 feet of track in Nagdevi Street, which was relaid in 1925. This would involve a debit to revenue of approximately Rs. 17,000 excluding permanent reinstatement. That is to say, the total cost of the alterations now suggested would amount approximately to Rs. 57,000.

“ We should have in any circumstances to ask for the reimbursement of the cost incurred in these works. In view of the circumstances set out, we suggest that the matter be held in abeyance until such time as Mahomedali Road has developed.”

The Tramways Committee recommended that the Police Commissioner be informed of the above letter.

This was confirmed under Corporation Resolution No. 3310 of 25th July 1932.

9. Dadar to King's Circle.

The following letter was addressed by the Managing Director to the Municipal Commissioner on 26th March 1920:—

" We have the honour to submit herewith 6 blue prints No. B. 2048/A, our Route Plan No. 23/A, depicting a proposed Tramway Extension from our present Terminus on Kingsway at Dadar along Kingsway to a point about 200 yards north of the centre of King's Circle. We have the honour to apply for the permission of the Corporation and the sanction of Government to the construction of this Extension "

The Municipal Corporation under their Resolution No. 2432, dated the 16th June 1920, sanctioned the above proposal.

The Police Commissioner, however, recommended that as the tramway was not at the time to be extended beyond King's Circle, the switch lines proposed to be placed on the north side of the Circle should be placed on the south side and no lines laid round the Circle. If the extension was made as proposed the Circle was likely to get blocked with tram cars as often occurred at the Museum.

The Municipal Commissioner's remarks on this point were :—

" It has now been decided that for the present the tram lines should terminate to the south of King's Circle and that they should not be carried to the north of the Circle until the time comes for a further extension towards Sion. No loop line will be laid on the road and the contingency suggested by the Commissioner of Police will not therefore arise."

Government thereupon sanctioned the extension under their Order No. 45, dated 4th January 1921. In other words, the permission was subject to the condition that the proposed tram line should for the time being terminate to the south of the King's Circle. Any proposals for the extension of the tram lines northwards beyond that point should be submitted afresh.

Official intimation under Clause 7 (a) of the Deed of Concession to start the work of constructing the extension from 1st March 1924 was given by the Company to the Executive

Engineer on 8th February 1924. Permission was accorded to proceed with the work in a manner similar to that employed between Elphinstone Road and the Dadar Terminus (14-5-1924).

The work was, however, not taken in hand as the question of constructing all tramway extensions was held in complete abeyance pending the result of the arbitration with the Municipal Corporation in regard to the fare system. In 1926 the Company obtained from the Municipality permission to erect an experimental trackless trolley route, on a reservation from north of our present Dadar Terminus to King's Circle. It was thought quite impossible for the Company to extend the tramway system to King's Circle, unless there were reasonable prospects of extensions proving to become economic propositions. The Company was strongly of opinion that there would be a substantial loss were it to extend its system to King's Circle. As regards the question of Trackless Vehicles, the Company came to the conclusion that under the existing circumstances they would not be suitable for Bombay and that there was no prospect of incurring anything but a loss in working them.

The matter was taken up by the Corporation and on the 29th August 1927 they passed a resolution requesting the Company "to take early steps for the extension of the tramway service from Dadar Terminus to King's Circle, Matunga."

By his letter of 7th October 1927, the General Manager replied that the Company could not give effect to the request of the Corporation. The General Manager's letter ran as follows :—

"I have the honour to refer to your letter No. 5559 of the 23rd August, with which you forwarded, by desire of the Tramways and Telephone Committee, copy of a letter, dated 20th July 1927, from the Joint Honorary Secretary, Matunga Residents' Association, regarding the extension of the tramways to King's Circle and the Omnibus Service in that area, and to your letter No. 6040 of the 10th September in which you informed us that the Municipal Corporation had on the 20th August passed a resolution requesting this Company to take early steps for the extension of the tramway service from Dadar Terminus to King's Circle, Matunga.

"By desire of my Board of Directors I have to inform you that the question of the proposed extension has been very carefully considered. My Directors have come to the conclusion that the Company cannot give effect to the request of the Corporation."

" I may explain that the estimated Capital Cost of constructing the Permanent Way and the Overhead Equipment together with the provision of the necessary Rolling Stock will be :—

	Rs.	Rs.
Permanent Way	1,61,754	
Overhead	17,280	
Rolling Stock (3 car units) ..	75,600	
A Total of say ..		2,55,000
Interest at 7 per cent. thereon would amount to Rs.		17,850
Depreciation would amount annually to Permanent Way at 8.1/3 per cent. on Rs. 1,61,754.	13,479	
Overhead at 2½ per cent. on Rs. 17,280	432	
Rolling Stock at 7 per cent. on Rs. 75,000	5,292	

	19,203
Standing Charges would thus total	<u>Rs. 37,053</u>

" Running our present No. 1 Service to and from King's Circle, instead of from our present Dadar Terminus, would necessitate running approximately 84,000 car-unit miles extra per annum. Taking the inclusive cost of running a car-unit mile (exclusive of all interest and depreciation) at the actual figure for the year 1926, namely annas 10.94 per car mile, it would cost per annum to work this extension 57,435

To which must be added the Standing Charges, namely 37,053

Or a total annual cost of Rs. 94,488

" We consider that this tramway extension would induce very little *additional* traffic, and at the most would not earn initially more than annas 3 per car mile run thereon. That is to say, on a basis of 84,000 car miles per annum, a total revenue of Rs. 15,750 would be earned, against a cost of Rs. 94,488, a loss of Rs. 78,738 per annum.

" I have to remind you that our Omnibus Service, inaugurated in the Dadar Area in June last, has had to be discontinued with effect from the end of August on account of the extremely poor support accorded to it by the public. The average earnings of these omnibuses, despite the higher fare charged than on the trams, did not attain even to annas 3 per omnibus mile, the lowest figure estimated above for the tramways. The receipts even then showed a tendency to fall.

" In view of the above, I trust the Corporation will agree there is no case in favour of the suggested extension."

This letter induced the Corporation not to press the Company to construct the extension (*vide* Corporation Resolution No. 11277 of 10th February 1928).

The General Manager by his letter of 8th/10th July, 1933, again applied to the Municipal Commissioner for the permission of the Corporation and the sanction of Government to the construction of this extension, provided the Corporation agreed to an additional fare of one half anna being charged to every passenger travelling on any portion of the extension.

The Corporation by their Resolution No. 94 of 10th May, 1934, acceded to our request to levy an additional fare of half an anna on the proposed extension, but desired that the facilities, which were being given on the Gowalia Tank Road extension, be also given by the Company to the King's Circle extension.

The Company by its letter, dated the 4th July, 1934, proposed to charge the following rates, reserving the right to withdraw them at any time and to levy a charge of half an anna, on the proposed extension.

1. From King's Circle to present Dadar Terminus $\frac{1}{2}$ anna.
2. From King's Circle to Lalbag 1 anna.
3. From King's Circle to south of Lalbag
as far as Tank Bunder, Jackeria Masjid, Pydhownie
and Girgaum, including all stations north thereof .. $1\frac{1}{2}$ annas.
4. From King's Circle to south of Wari Bunder,
Jackeria Masjid, Pydhownie and Girgaum .. 2 annas.

This was approved by the Corporation by their Resolution No. 500 of the 15th November, 1934 and the line — 0.927 in length—was opened for traffic on 16th June 1935.

10. Tardeo Terminus to Hornby Vellard.

When the work of extension of the tramway over Falkland Road Bridge as far as the Petit Mills was being carried to completion, Mr. Dhunjibhai Bomanji Petit and 282 others addressed a letter to the Corporation on 1st January 1908 petitioning for the extension of the tramways from its new terminus at Tardeo as far as the junction of the Warden, Worli, Clerk and Pedder Roads.

Mr. Rimington in his letter of 21st January 1908 wrote to the Municipal Commissioner as follows :—

“ With reference to this petition I have the honour to say that this Company is not prepared to make this extension at present. The result of our observation is that except during a few hours of the day, or except on certain native festivals, there is not as yet sufficient traffic along this road to pay a reasonable return on the cost of extending and working the tramway there. There are other roads in the city, either already in existence or which will shortly be completed, where extensions of the tramway will in the near future become more urgent. The Company must give preference to these when considering the question of what extensions its resources will allow of.”

On 25th April 1913, the Managing Director addressed the following letter to the Municipal Commissioner on the subject from London, which was forwarded by the Deputy Engineer on 28th May 1913 :—

“ Extension of the Tramway from its present Terdeo Terminus along the Mahaluxmi Road to the junction of the Hornby Vellard with Clerk and Warden Roads.

“ The Corporation and the Company have on more than one occasion been the recipients of public petitions advocating the making of this extension. The last of these was received by the undersigned when recently in Bombay, and he then undertook to submit the matter for the consideration of this Company’s Directors.

“ It has now been discussed by the Board and I am instructed to submit to you their views. Under existing conditions this extension is not an attractive one from a traffic standpoint. As you are aware there has been but little building on this portion of the Mahaluxmi Road, while the smell nuisance caused by the Love Grove Sewage Pumping Station has prevented building on the foreshore north of the Vellard or on the vacant lands to the east of the Love Grove Road. It has also militated against the frequentation of the Vellard as an evening pleasure resort.

“ My Directors understand that the Municipality have now resolved to carry the discharge pipes from the Pumping Station further out to sea, and to adopt other measures to get rid of the disagreeable smells the sewage outfall there now gives rise to. So soon as this is successfully accomplished it seems reasonable to anticipate that considerable building developments on the above mentioned areas will result, especially if the tramway be ultimately extended to a terminus in or beyond the Worli Woods. But before that would be feasible the Love Grove Road must be widened and graded.

The tramway could then, so soon as the traffic inducements warrant it, be extended along the eastern side of the Hornby Vellard and along the Love Grove Road, and the Worli Road, thus serving an area which is at a considerable distance from the railway.

"I have referred to these possibilities of the future because they have had some influence on the minds of my Directors when considering the question of an immediate extension of the tramway along the Mahaluxmi Road. After giving the matter full consideration they have requested me to inform you that subject of course to the sanction of the Corporation and the approval of Government, they are willing to make this line, in accordance with the plan herewith submitted for your information, provided that (a) the works to remove the Love Grove drainage outfall smell nuisance are likely to be completed in course of next year; and (b) that the fares to and from the proposed new tramway terminus at the south end of the Hornby Vellard be fixed as follows:—One anna between this terminus and Pylhownie and Portuguese Church (Girgaum) on the south, and one anna between this terminus and Lal Bag (Parel) on the north. The fare to and from the terminus and any point on the existing tramway lines beyond the above mentioned stations to be $1\frac{1}{2}$ anna.

"Perhaps you will be good enough to place this letter before the Corporation and if it is their desire that my Company should proceed with the making of this extension, on the above conditions, after the approaching monsoon, communicate that decision to our Managing Engineer in Bombay."

The Municipal Commissioner's letter of 3rd July 1913 was as follows:—

"With reference to your letter No. 4061 of 28th May 1913 forwarding a letter, dated 25th April 1913, from the Managing Director suggesting the extension of the Tramway from the present Tardeo Terminus to the Vellard, I have the honour to inform you that it is proposed to widen the road as now marked in yellow lines on the plan which is herewith returned. You will see that the Tramway line as proposed by you will not be in the centre of the road after it is widened to 50 feet, and this widening may take some time to effect. Even, however, when the widening is made there will be left only 9 feet 6 inches for carriage way on each side of the tram track. This road will carry a large amount of fast traffic as it is the direct road to the Race Course and is also the road by which the traffic, nearly all of which will be fast, proceeding to Bandra and the north of the Island will largely proceed. I think therefore that, instead of laying down a tramway track, this would be an

excellent place to try the trackless trolley system which would not have to wait for the widening of the road. The adoption of this system will also save a great deal of diversion of water mains, drains and other underground works.

" 2. The adoption of the trackless trolley would probably render it necessary to provide a stronger road formation and your Company would be required to contribute towards its maintenance. If, however, a permanent tram track were to be laid along the roadway I think that the Corporation would expect the Company to pay the cost of diversions of pipes and drains necessitated by the tramway track and also to contribute towards the cost of widening the road. I have the honour therefore to suggest that you should propose to your Home Managing Director the desirability of considering whether the trackless trolley would be possible on this line. If the trackless trolley were successful it would, I think, be much easier to continue it along Worli Road than would be the case with the permanent tram track."

The proposed alterations in the alignment of the road were considerable, and our tracks, if laid, would have to be slewed in future to suit the new road and the expenditure of such slewing was considered very heavy. It was therefore decided (and the Municipality also so informed us) that until Tardeo Road was widened, nothing could be done in the matter.

In 1921, the Corporation took up this question. The President of the Corporation (Sir Sassoon David) wrote as follows on 25th August 1921 :—

" I have the honour, by desire of the Municipal Corporation of Bombay, to request you to be so good as to move your Company to extend the Tramway service from the present Tardeo Terminus to the Hornby Vellard at an early date as the proposed extension will, in the opinion of the Corporation, give facilities to the large number of visitors to the Mahaluxmi Temple and Haji Ali Shrine as well as to the general public for resorting in large numbers to the Hornby Vellard Promenade."

The Managing Engineer's reply dated 6th October 1921 was as follows :—

" With reference to your letter No. 4722 of the 25th August last, I have the honour to inform you that my Directors have very carefully considered the request of the Corporation in regard to extending the Tramway System from the present terminus at Tardeo, along Tardeo Road to the Hornby Vellard.

" It is with no little regret that my Directors feel that they would not be justified in authorising this extension at the present moment. They understand that very considerable developments in that area of the City are likely to result from the proposed alterations to the B B & C. I. Railway's terminal station. They feel that, until the layout of such alterations is definitely agreed upon, it would not be right for them to extend the Tramway system in that locality.

" I am however to add that, as soon as final development plans are settled, my Directors will only be too ready to consider further extensions of the Tramway System. I am to ask that the Corporation will be so kind as to use their influence to accelerate such final decisions, with a view to preparing the way for improved Tramway communications "

In view of the decision of Government regarding the location of the Grant Road Terminal Station, the President (Mr. Mirza Ali Mahomed Khan) at the desire of the Corporation requested the Company on 10th July 1922 to reconsider the representation made to it on 25th August 1921.

The reply of the Company was sent by the Deputy Managing Engineer on the 13th July 1922 and was as follows : -

" I have the honour to inform you that your letter No. 2969, dated 10th July 1922, was placed before my Board at their last meeting and I was instructed to inform you that owing to the great increase in the Capital Cost of Tramway Extensions and the present impossibility of earning an adequate return on such heavy expenditure, the Directors have reluctantly decided that they are unable to consider the construction of any further Tramway Extensions prior to the revision of the present scale of tramway fares "

On 12th July 1929, the Corporation passed the following further resolution in this matter :--

" No. 3276. That in view of the question of fares on Tramway Extensions having been settled, the Commissioner be requested to request the Tramways Company to undertake at an early date the extension of the Tramway Service from the Tardeo Terminus to the Hornby Vellard."

We replied to the Executive Engineer on 13th December 1929 as follows :—

" With further reference to your letter No. E.G./34/C of the 18th November 1929, we have the honour to inform you that a considerable portion of the road between the present Tardeo Tramway Terminus and the Hornby Vellard, along

which we are asked, under Corporation Resolution No. 3276 of the 12th July, to lay a tramway extension, is still too narrow for a double tramway track. For a distance of 1,200 feet the minimum width is 32 feet ; for a distance of 500 feet the minimum width is only 28½ feet. The total length of the proposed extension is about 3,720 feet.

“ Under Corporation Resolution No. 2963 of the 25th September 1905, the general rule was laid down that 16 feet should be left clear for other traffic on either side of tram cars. The minimum width of road, which permits a double track to be laid, is approximately 49 feet in the terms of this resolution.

“ Under these circumstances, the Directors of this Company regret that it is not feasible to construct this extension, until the Municipal Corporation acquire the necessary property and suitably increase the width of the road.

“ Should however the road be widened up to a minimum of 49 feet throughout, the Directors will give their most favourable consideration to the request that the extension be made.”

11. Jacob's Circle to Mahim Woods.

So far back as 1911, the Company contemplated laying an extension of tramways from its Jacob's Circle Terminus along Arthur Road and DeLisle Road to Elphinstone Road and thence to a group of mills at the commencement of Mahim Woods. But it was impossible to do so until the DeLisle Road Overbridge was built over the B. B. & C. I. Railway.

12. Jacob's Circle to Portuguese Church, Dadar.

For information as to an extension from Jacob's Circle over Arthur Road, DeLisle Road and thereafter up to Portuguese Church, Dadar, see item D of our letter of 10th June, 1933, on page 129 *seq.*

13. Improvement of Communications with Worli.

There has long been an idea that we should probably desire to extend the Tramway System to Worli. In 1924, we asked the Director of Development if he could do anything to urge the Municipality to make up Haines Road. If this were done we were then prepared to consider running

Trackless Trolley vehicles from Mahaluxmi Station to the Development Chawl Area at Worli. Nothing definite transpired until the Executive Engineer, Municipality, wrote to us on 24th September 1927 asking for our proposals as to crossing the new Mahaluxmi Overbridge. The Deputy Secretary to Government, Development Department, also wrote to us on 28th September 1927 asking for information as to our intentions, the need for opening up communications with Worli being urgent. The main question was what transportation—Tramway or Omnibus—was required. To link up from Jacob's Circle *via* the new Mahaluxmi Overbridge to the Chawl Area at Worli by a Tramway Extension was estimated to cost roughly Rs. 4 to 5 lakhs, the distance being about $1\frac{1}{2}$ miles. It was thought very doubtful if the Chawls or the Worli Seaface Area would produce remunerative traffic. The following letter was addressed by the General Manager to the Deputy Secretary to Government, Development Department, on 11th October 1927 :—

" I have the honour to acknowledge receipt of your letter No. S. D. 1705 of the 28th ultimo, and to inform you that I placed it before my Board at their meeting.

" I was then directed to inform you that my Board have noted that the Special Advisory Committee attached to the Development Directorate consider that communications between Worli and Jacob's Circle require to be improved. Also that the anticipated opening of the Mahaluxmi Overbridge next year will enable this to be done. Further that you state the chawl area at Worli has now become very popular, and that as the working class population therein is steadily increasing, the need for improving communications, as soon as the overbridge is opened for traffic, will be very urgent.

" My Directors feel that the situation is not free from complication, in that at the moment they are not in possession of any information as to what the potential traffic requirements of the population of the chawl area are likely to be. So far there are few signs of other new buildings in the Worli area. My Directors consequently are of opinion that, for some years to come at any rate, transport will only be required by the working class population of the chawl area. I am however to inquire whether you can furnish me with approximate statistics showing where the present inhabitants of the chawls work, and what number of them might be expected to avail themselves of any transport facilities that might be provided between the chawl area and Jacob's Circle.

" A personal interview with the Director of Development may be desirable and I would be glad to discuss the question with him at his early convenience on receiving intimation.

" As I have been approached demi-officially by the Executive Engineer, Bombay Municipality, in this connection especially with a view to learning our intentions as to the Overbridge itself, I am forwarding a copy of this letter to that officer for his information."

The Director of Development replied to the above letter on 9th November 1927 saying that, as there were 3,000 tenants, the population of the Chawl Area was about 15,000. There were also 77 shops. Of tenants, over 300 travelled daily along Haines Road as far as Mahaluxmi Station to reach their work. Probably more residents travelled, but they were not registered tenants. Census on Haines Road on 5th November 1927 showed that 5,889 persons, mostly mill-hands and coolies, used that road, of whom probably not more than 10 per cent. would use the tram, say 600 daily.

The General Manager's conclusions on the above were as follows :—

" There is no hope of a tramway paying at present. The cost would be from Rs. 4 to 5 lakhs, on which Depreciation alone would amount to about Rs. 35,000 to Rs. 40,000 per annum, i.e., 3 to 4 times the estimated potential revenue.

" It is not impossible that a Tramway Extension may have to be laid some day over the Mahaluxmi Overbridge. If there were any certainty in this it would probably be wise to endeavour to arrange for the concrete bed to be laid to such a design that tram tracks could be laid thereon at some later date with a minimum of disturbance. I think the extra cost involved would be about Rs. 10,000 which would have to be paid now. After mature consideration I do not feel justified in recommending this procedure, as I feel the extension of the tramways is problematical to a degree."

The Board decided definitely against the tramway over the overbridge on 24th November 1927. The General Manager wrote the following letter to the Special Engineer, Development Works, Municipality, on 28th November 1927 :—

" With reference to our recent conversations, and to D/O correspondence ending with your letter to the undersigned dated 24th November, we now have the honour to inform you that our Board has carefully considered the question of providing tramway communications from Jacob's Circle over the new Mahaluxmi Overbridge to the Worli Area.

" It appears to our Directors that there is but little possibility of a tramway service in that district ever becoming an economic proposition. From a careful survey of the

traffic potentialities, it seems that, at the present time, earnings would not amount to more than from one quarter to one third of the amount that would have to be appropriated annually against depreciation alone, that is to say, without taking into account Interest Charges or Running Expenses.

" Under the circumstances our Board has decided not to ask you to arrange for the road foundations over that overbridge to be specially constructed, with a view to tramway tracks being laid thereon at a later date.

" We have however been instructed by our Board to examine further the possibilities of an Omnibus Service in that locality. This is now in hand."

The following reply was given on the same date to Mr. R. D. Bell, Secretary, Development Department, by the General Manager :—

" With reference to your D/O letter of the 9th instant, for which very many thanks, my Board have definitely decided not to ask Mackison to lay foundations, suitable for a tramway, over the new Mahaluxmi Overbridge. I attach a copy of my official letter to him No. 13782/27 of date for your information.

" I am investigating the Omnibus problem further, but from whatever point of view I regard it, I can see nothing but a dead loss.

" *Could you not persuade Government to assist us with a small subsidy, say something in the nature of Rs. 3,000 per month, for a 3 months trial of a service every 10 minutes from 6 a.m. to 8 p.m. daily ? If you could do anything in this direction, the problem would be greatly simplified !* "

The proposal regarding the subsidy was not favoured by Government.

The question of establishing quick and cheap means of communication between Worli and the City again came up before a meeting of the Sub-Committee of the Works Committee of the Corporation on 9th January, 1933. There was a concensus of opinion among the Committee that some means of communication should be established in order to make the area habitable as early as possible. The City Engineer, therefore, wrote to us on 3rd March, 1933, enquiring whether the Company had any scheme under contemplation for affording transport facilities between the Worli Area and the City so that the disposal of the building plots in that area could be facilitated.

The General Manager's reply, dated the 16th February, 1933, to this was that the extension of the tramways to the Worli Area could not possibly be an economic proposition ; but that the project was engaging the attention of the Company and that as soon as omnibuses became available through the re-equipment of the fleet, it proposed to run a trial service in that area to test its traffic possibilities.

By his letter of the 14th November, 1933, the City Engineer enquired whether the trial run of omnibus service had been undertaken and, if so, with what results. He also wished to know whether the Company desired any guarantee from the Corporation to run a regular tramway or omnibus service in that locality.

The General Manager replied on the 22nd November, 1933, that the trial omnibus service between Worli and the City had not been undertaken due to want of omnibuses. Those which would become available would be employed in the experimental service between King's Circle, *via* Parsi Colony, along Bhawanishanker, Gokhale and DeLisle Roads to Byculla Bridge, as that service was considered to be of the first importance. As regards the subsidy, if a small sum of about Rs. 3,000 per month, for a three months trial of a service every ten minutes from 6 a.m. to 8 p.m. daily, could be procured, the Company promised to endeavour to accelerate the inauguration of the Worli service.

A trial omnibus service was introduced by the Company between Worli and the Lower Parel Station in July, 1934, and the Corporation by their Resolution No. 369 of 27th September, 1934, approved of the Works Committee's recommendation to await the result of this service and requested the Commissioner to report on it.

On 29th August, 1935, the Corporation passed a resolution (No. 365) requesting the Works Committee to consider in consultation with the Commissioner the desirability and feasibility of widening Haines Road so as to make it fit to receive tramway lines and public buses. The City Engineer wanted to know (26-9-1935) whether the Company was prepared, in case the Municipality took steps to widen the road as suggested, to lay tram lines and run bus service along the road which would in his opinion facilitate the early development of the Worli Area.

The General Manager by his letter of 12/14th October, 1935, replied that when the foundations of the Mahaluxmi Overbridge were under consideration, it was decided that it would not be an economic proposition to lay tramway lines along this road, and that since then, conditions had not improved so as to reconsider the question. He added if the road was made into a first class road, the Company would, subject to Police permission, test out the possibilities of the route with an omnibus service, in the first instance during rush hours, and eventually throughout the day if traffic warranted the expansion.

14. Dadar Via the Tramway Workshops to Wadala.

The Corporation passed the following Resolution on 6th August 1928 :—

'No. 4140. That the Tramways Committee be requested to report on the desirability of extending the Dadar Tram lines *via* the Tramways Workshops to Wadala Road with a view to affording facilities to the residents of the Parsi Colony at Naigaum and Wadala.'

Our reply to this dated 23rd August 1928 was as follows : —

" Corporation Resolution No. 4140 dated 6th August 1928.

" With reference to your Memo. No. 4447 of the 14th instant, we have the honour to inform you that from experience obtained when at the request of the Parsi Association we ran a 12 minute Omnibus Service from King's Circle to Dadar Tram Terminus *via* Wadala Road from 1st August 1927 and had to withdraw same at the end of the month on account of the poor support accorded to the service, the average number of passengers per mile being only 2.87, we consider the suggestion made in the above resolution would not prove a remunerative one.

" We regret therefore that the suggested extension cannot be considered."

15. Extension of Tramway Service from Parsi Statue, Byculla, over DeLisle Road to Lady Jamshedji Road up to Mahim Causeway.

The following Resolution No. 4523 passed by the Corporation on 15th August 1929 was sent to us :—

" No. 4523. That the Commissioner be requested to approach the Tramways Company with a view to the extension of the Tramway service from the corner of the

Parsi Statue at Byculla over DeLisle Road and the Lady Jamshedji Road up to Mahim Causeway."

The General Manager wrote to the Municipal Commissioner as follows on 18th September 1929:—

" Extension of Tramway Service from the corner of Parsi Statue at Byculla Bridge along DeLisle Road up to Mahim Causeway.

" With further reference to your letter No. M.C./13/A of the 3rd instant, I have the honour to inform you that I have referred to my Directors the question of constructing the above tramway extension, as desired by you pursuant to Municipal Corporation Resolution No. 4523 of the 15th of August 1929.

" The present position is that DeLisle Road, for a considerable portion of its length, is only about 30 feet in width. It is consequently not feasible to lay a double tramway track on that road.

" My Directors therefore instructed me to say that, as it is physically infeasible to construct this extension at present, they will be prepared to consider sympathetically the construction thereof, when the necessary width of road becomes available. They feel that it is wiser not to discuss the question of the northern terminus of such an extension now. Developments may fructuate, prior to the widening of DeLisle Road itself, which may necessitate alterations in any proposals that may now be considered."

This question was again on the Corporation Agenda of April, 1933. The Deputy City Engineer, therefore, wanted to have our views in the matter (24th April, 1933).

For our reply, see item E of our letter No. 8131 of 10th June, 1933, on page 129 *seq.*

16. Proposals for Extension of Tramway Lines from Dadar (Parsi Colony) to Bhawanishanker Road and Worli, etc., across Tilak Bridge.

The following two Resolutions No. 4517 of 15th August 1929 and No. 5815 of 30th September 1929 of the Corporation were sent to us for our remarks:—

" No. 4517. That in view of the widening of the Lady Jamshedji Road, Dadar, the Tramways Committee be requested to consider in consultation with the Commissioner the desirability of extending the tram lines at the Dadar

Junction from over the Tilak Bridge, Dadar, to serve the convenience of the residents along the Lady Jamshedji Road, and to report on the same."

" No. 5815. That the Commissioner be requested to request the Bombay Electric Supply and Tramways Company, Ltd., to extend the Tramway service from Dadar (Parsi Colony) to Lady Jamshedji Road, Tilak Bridge, Mahim, Parel, Worli and Bhawanishanker Road "

Our reply to these resolutions was contained in our following letter addressed to the Executive Engineer, Municipality, on 18th November 1929 :—

" With further reference to your letter No. E. G. 49/C of the 24th ultimo, I have the honour to say that I have now referred to my Board the proposals made under Corporation Resolution No. 5815 of the 30th of September last, whereunder it was resolved that the Commissioner should be asked to request this Company to extend the Tramway Service from Dadar (Parsi Colony) to Lady Jamshedji Road, Tilak Bridge, Mahim, Parel, Worli and Bhawanishanker Road.

" My Board has given the fullest consideration to these suggestions but regret that, to the best of its belief, existing conditions do not warrant the construction of either of these extensions.

" My Board is however prepared to issue orders, should the Corporation so desire, that the possibility of running a temporary experimental Omnibus Service from Mahim to Parel, *via* Gokhale Road and Elphinstone Bridge, should be explored with a view to ascertaining the nature of the demand for transportation which may exist in that area "

The Corporation passed a further resolution on 24th July 1930 which was as follows :—

" No. 3030. That the Tramways and Telephone Committee be requested to consider in consultation with the Commissioner and report on the advisability of extending the Tramway Track from Dadar Terminus further westwards over the Tilak Bridge to a point somewhere near the junction of Lady Jamshedji Road with Portuguese Church Street in Dadar (West), as the thickly populated locality in Dadar proper badly needs the facility of Tramway Conveyance."

Our reply, dated 18th August 1930, was as follows :—

" In reply to your letter No. 3485 dated 7th August 1930 with reference to Corporation Resolution No. 3030 of 24th July 1930 regarding extension of Tramway Tracks from Dadar to Lady Jamshedji Road, we have the honour to

refer you to our letters No. 15778/29 of 18th November 1929 and No. 11244/30 of 1st August 1930 which fully explain the situation. As nothing has arisen since to alter this we regret having nothing further to add."

17. Tramway Lines up to Lady Jamshedji Road.

The Corporation by their Resolution No. 8571 of 16th January, 1933, requested the Tramways Committee to report on the question of the feasibility of extending the tramway lines from the existing tramway track on Vincent Road over the Tilak Bridge to the foot thereof at Lady Jamshedji Road. On the 11th February, 1933, the City Engineer wrote to us that the conditions might have been changed since we reported to them in our letter of 18th November, 1929, and he wished us to examine the question in the light of the altered conditions.

The General Manager in reply to this wrote on the 10th June, 1933, that the Company could not act upon this proposal as the expenditure that would be involved could not possibly be justified.

As the Tramways Committee on 20th July, 1933, asked us to reconsider the question, the General Manager wrote on 17th October, 1933, that the Company was forced to the decision that the capital expenditure that would be incurred could not be expected to be remunerative at the time. The Company however appreciated the claims of the inhabitants of the area to west of the railways in the vicinity of Dadar for improved facilities for transport by road and was prepared to operate an experimental Omnibus Service from King's Circle, *via* Parsi Colony, along Bhawanishanker, Gokhale and DeLisle Roads to Byculla Bridge, as soon as omnibuses were available.

We commenced running an omnibus service from Dadar Tram Terminus to Mahim Fort on 2nd December, 1934. The results obtained of this traffic up to October, 1935, were not favourable. It would not, therefore, be remunerative to lay tram tracks on this route. The Corporation, however, passed a resolution (No. 589) on 7th November, 1935, requesting us to consider the advisability of extending the tram service from Dadar Tram Terminus to Mahim over the Tilak Bridge *via* Lady Jamshedji Road.

18. Extension of Tramway to "Bombay Central" Railway Station.

The Municipal Secretary forwarded to us a copy of the following resolution passed by the Corporation on 23rd March 1931 :—

" No. 10244. That the Corporation with a view to securing greater facilities for the public for reaching the Bombay Central Station requests the Authorities of the Bombay Electric Supply and Tramways Company, Ltd., to construct Tram Lines by any suitable route at an early date so as to carry passengers to that Station."

The General Manager replied to this by our letter of 18th June 1931 addressed to the Municipal Secretary as follows :—

" With further reference to your letter No. 246 of the 9th April, we have the honour to say that we have now fully investigated the question of constructing an extension of the Tramway System to Bombay Central Station, as desired by the Municipal Corporation under their Resolution No. 10244 of the 23rd March 1931.

" We have in this instance the experience gained, when Colaba was the terminal station of the B. B. & C. I. Railway, to guide us. The tramway services, which were available for passengers travelling to that station, were not then used to any appreciable extent by railway passengers. The stream of victoria traffic was then as intense as that which has been created to Bombay Central, since its opening in December last.

" We also have the benefit of the experience gained from our present "D" Route Omnibus Service, which runs from Museum past Bombay Central to Lal Bagh, thus serving both the northern and southern areas of the City. From actual counts taken of passengers boarding and alighting from those omnibuses in the vicinity of Bombay Central, it is obvious that there is no great demand for such a service on the part of railway passengers, of whom very few utilise the facilities now in existence.

" The hours at which any tramway extension might be used by intending passengers, or their friends, would be few, as can be seen from an examination of the B. B. & C. I. Railway Main Line Time Table. We find that trains are scheduled to arrive and depart from Bombay Central daily as follows :—

<i>Between the hours of</i>	<i>Arrivals.</i>	<i>Departures.</i>
5-20—8-55	5	2
13-25	—	1
14-25	1	—
19-5—22-5	2	5

a total of 16 trains per day.

" We have carefully examined the question of extending the Tramway System to Bombay Central, and are of the opinion that the most suitable method would be by laying a single line tramway along the centre of Lamington Road, branching off the existing double tram track in Falkland Road just south of the overbridge, to a point where a terminal double track siding would be essential in the centre of Lamington Road, opposite the 3rd class Waiting Hall situated in the compound of Bombay Central. The length of such an extension would be approximately 700 yards, that is the distance from the nearest point on our existing Tramway System.

" The Standing and Running Charges in respect of such an extension would amount to about four times the revenue to be derived therefrom. The probable revenue has been estimated on a liberal basis.

" Under these circumstances our Directors, who have given due consideration to the matter, regret that they are *unable at the present time, when trade is bad and traffic is consequently slack, to meet the wishes of the Corporation. But we are instructed to say that the prospects of this traffic are being carefully watched, and our Board will reconsider the question as soon as general conditions warrant a reinvestigation.*"

On the 3rd September, 1931, the Tramways Committee resolved that further negotiations be carried on with the Company "in the matter of the extension of the tramway line from Grant Road Station right up to the Bombay Central Station."

The following letter dated 13th November 1931 was addressed by the General Manager to the City Engineer :—

" With further reference to our letter No. 14299/31 of the 10th of October, we have the honour to say that we have very carefully reinvestigated the whole problem in connection with the possibility of constructing a tramway extension to Bombay Central Station.

" We examined this matter most carefully in May last, and we regret to have to say that we have once again been forced to the same conclusion as communicated to the Municipal Secretary, in our letter No. 8626 31 of the 18th of June last, in which we stated that ' our Directors regret that they are unable at the present time, when trade is bad and traffic is consequently slack, to meet the wishes of the Corporation.'

" We can, therefore, only repeat our promise to continue to watch the prospects carefully, and to re-consider the

question as soon as we see any such change in general conditions, as will warrant a re-investigation."

19. Extension of Tramway Siding Lines opposite General Post Office to Ballard Pier.

The following resolution was passed by the Corporation on 26th October 1931 :—

No. 6875. " That the Commissioner be requested to address The Bombay Electric Supply and Tramways Company, Limited, to extend their siding lines from opposite the General Post Office to Ballard Pier along the route of their D (Lal Baug) Bus Service and to run therefrom tramway service to Patel (a) *via* Mahomedally Road and (b) *via* Girgaum Road "

The General Manager gave the following reply on 13th November 1931 :-

" With further reference to your letter No. W. M. 6098 TD of the 16th ultimo, we have the honour to say that until recently we were running a tramway service from Parel, *via* Mahomed Ali Road, to the siding adjacent to the General Post Office. This service was not at all popular: Figures taken before it was diverted to Museum, showed that approximately 80 per cent. of the passengers desired to travel *via* Hornby Road. In view of that fact, on September 14th last, we diverted that service from the General Post Office Siding to run *via* Hornby Road and terminate at Museum, a change from which immediate improvement was apparent, and considerable satisfaction was afforded to the travelling public. We are not, therefore, of opinion that there is any general demand for the suggested extension of the tramways to Ballard Pier.

" We must add that it would be impossible to run services from Parel, *via* Girgaum Road across Bori Bunder Junction, to the existing siding at the General Post Office, without redesigning and reconstructing the whole of the intricate junction at Bori Bunder.

" Our opinion, that there is no serious demand for such a tramway extension, is strengthened by the fact that we have now an Omnibus Service running from Lal Baug, *via* Lamington and Girgaum Roads through Ballard Estate to the Museum. This apparently satisfies all requirements, which are quite inconsiderable, except from say 9—11-30 in the morning, 1—2-30 in the afternoon, and 4—7-30 in the evening. Moreover, that Omnibus Service is not patronised to any appreciable extent on Saturday evenings or on Sundays.

Our Directors have given their careful consideration to this request but regret that, in view of the circumstances set out above they are unable to see their way to incur the heavy capital expenditure that would be necessary if the proposal were to be adopted "

The Deputy City Engineer on 16th March, 1933, asked us to let him have our remarks regarding the extension of tramway service from the terminus at Fort Street across Frere Road along the Wittet Road up to the gate of Mole Station. In reply (20-3-1933), we referred him to our previous letter of 13th November, 1931, and regretted our inability to reconsider the question.

20. Various Tramway Extensions.

As the Municipal Corporation passed several Resolutions in connection with extensions of tramway lines during the year 1933 and as these extensions were to a certain extent inter-dependent on one another, the General Manager dealt as a whole with the problems involved and wrote the following letter to the Deputy City Engineer, Bombay Municipality, on the 10th June, 1933 —

We have the honour to refer to correspondence ending with your letter No C E,1166, dated the 31st May 1933 with which you sent us a plan showing the various tramway extensions referred to in the following Corporation Resolutions, etc

Reference	Corporation Resolution No	Date	Subject matter under reference
A	8315	9-1-33	Re the desirability of shifting the existing Tram Terminus at Dadar about 150 yards to the North
B	8571	16-1 33	Re the feasibility of extending the tramways from the present track on Vincent Road over the Tilak Bridge to the foot thereof at Lady Jambhedji Road
C	10050	24-2-33	Re the desirability of extending the tramways from the present terminus at Dadar to King's Circle

Reference.	Corporation Resolution No	Date	Subject matter under reference
D	10299	6-3-33	Re the desirability of extending the tramways from Jacob Circle over Arthur Road, DeLisle Road, and thereafter northwards over both Bhawani shanker Road as far as Tilak Bridge, and Gokhale Road south as far as the Portuguese Church at Dadar
E	Item 94 Corporation Agenda.	April 1933	Re the provision of a Tram or Omnibus Service from Byculla Bridge to Mahim via DeLisle Road, Gokhale Road and Lady Jamshedji Road

A. Shifting of Dadar Tramway Terminus.

From a perusal of our reply to Item C below, it will be seen that the necessity for making this change will not arise.

B. Extension over Tilak Bridge.

We have carefully investigated this proposal, but our Directors consider that the expenditure that would be involved could not possibly be justified. They, therefore, regret that they are unable to act upon this proposal.

C. Extension to King's Circle.

The proposal to extend our tramways system from the present Dadar Terminus to King's Circle has once again been most carefully reviewed. As a business proposition, our Directors regret that they would not be able to sanction the construction of this extension, since the most optimistic estimates of the probable traffic receipts therefrom show that it could not possibly pay. But our Directors, with a view solely to meeting the frequently expressed wishes of the Corporation in this matter, have now authorised us to apply for the official sanction of the Corporation, and the approval of Government, to the construction thereof, provided the Corporation will agree to an additional fare of one half anna being charged to every passenger travelling on any portion of that extension between the present Dadar Terminus and King's Circle.

We shall, therefore, submit the necessary application in due course.

D. Extension from Jacob Circle to Portuguese Church, Dadar.

The main portion of this proposed extension would have to be laid along DeLisle Road. For many years this Company has been prepared to consider a tramway extension along that road, to form a link between Byculla Bridge and the southern portion of Mahim. But unfortunately DeLisle Road is so narrow that a double track extension has never been feasible. Consequently it has not been possible to formulate proposals for this extension.

This Company is prepared, as soon as DeLisle Road is widened sufficiently to enable a double tramway track to be laid throughout, to consider most carefully the question of a tramway extension from Byculla Bridge along DeLisle Road, as far as Elphinstone Road, and further, if the proposition is then found at all feasible economically, to apply for the necessary sanction of the Corporation, and the approval of Government to the construction thereof, subject to the Corporation agreeing to a suitable additional fare being charged to passengers travelling thereon.

E. Tram or Omnibus Services : Byculla Bridge to Mahim.

This proposal is largely covered by our reply to Item D above. We regret that we are not in a position to extend the tramway system into Mahim, where extensions could not possibly be remunerative.

We are, however, planning to run experimental omnibus services in the Mahim Area at as early a date as possible. We hope this will be feasible early in 1934. Additional omnibuses are now under construction. When these new large vehicles are in service, as we hope they will be before the end of this year, some of our smaller omnibuses will be released, and will become available for testing the potentialities of traffic in new areas.

We believe we have now dealt with all matters outstanding in connection with proposed tramway extensions."

The Tramways Committee on 30th October, 1933, requested the Commissioner to report on the following Resolution No. 5744 which had been passed by the Corporation on the 9th idem, after consulting the Company :—

"That the Tramways and Telephone Committee be requested to report in what parts of the City, the extension of the tramways is a necessity and they be asked to inquire whether the Bombay Electric Supply and Tramways Co. are prepared to make these extensions.

" That the attention of the Committee be drawn to Clause 1 (a) of the Deed of Concession dated the 7th August 1905 with the B. E. S. & T. Co. and the Committee be requested to submit a report showing the estimated cost if the Corporation undertakes the work on the refusal of the B. E. S. & T. Co. to make the necessary extensions "

Our reply to this was contained in our letter No. CNM/17802/33 addressed to the City Engineer on the 18th December, 1933, as follows :—

" Tramway Extensions in the City."

" With further reference to your letter No. S. R. 7267 of the 21st November, 1933, we have the honour to say that we have given the question of the extension of tramways in the City and Island of Bombay our most careful consideration. The programme adumbrated as the fruits of this study is set out herewith in the hope that this Company, in consultation with and the final approval of the Bombay Municipal Corporation, can lay out a scheme for the comprehensive development of transportation facilities.

" In our opinion the best means of approaching this question is to recur to the Report of the Bombay Development Committee, which made a complete survey of the position and issued its recommendations in 1914. At the invitation of this Committee our then Managing Director submitted a generous programme, which is set out on page 173 of the Report. On page XIX of the Report, under Section 44, the conclusions of the Committee on this programme are stated; the gist of these conclusions was that our Managing Director had 'looked far ahead in making his proposals, some of which could not be carried out for many years to come.' The Committee recorded the opinion that two additional tramway extensions needed consideration, viz. —

- (1) From the North of DeLisle Road, along the projected 100 foot road to Bandra Causeway,
- (2) From Sewri Station on the G. I. P. Harbour Branch Railway, along the proposed road past Parel Tank, the old Government House, the Parel Tramway Terminus, and over the new Elphinstone Bridge to link with the Bandra Causeway Extension.

" For the convenience of easy reference, we have set out in the schedule, which accompanies this letter, the tramway routes suggested by this Company in 1914, together with the additional routes proposed by the Development Committee. Also, the position to-day in regard to all the extensions then considered desirable. From an examination of this schedule, we think, it will be agreed that this Company has been fully alive to its responsibilities as providers of tramway

**SCHEDULE to letter No. CNM/17802/33 of 18th December, 1933, to
the City Engineer, Bombay Municipality.**

Ultimate Tramway System, as foreseen in Report
to Bombay Developments Committee in 1914.

Extensions between

Position in 1933

- | | | |
|----|---|---|
| 1 | Sandhurst Road from I rere Road to Falkland Road | A tramway extension from I rere Road, along Sandhurst Road to its intersection with I amington Road, was constructed in April, 1920 |
| 2 | DeLisle Road - Byculia Bridge to Dadar | This road has not been widened throughout. Consequently it has not been possible to construct a double tramway track from Byculia Bridge to Flphunstone Road, but the Company is prepared to construct this extension as soon as the road widening has been fully completed |
| 3a | Reay Road from Wari Bunder to centre of Sewri Reclamation | This extension was constructed in March, 1921, from Wari Bunder to Victoria Bridge. From Victoria Bridge to the New Sewri Cotton Depot (October 1923) |
| b | Cotton Depot at Sewri | This is served by the Reay Road Extension to the Cotton Green |
| 4. | Victoria Road from Victoria Overbridge to Parel Road | The necessity for this track has not arisen. The tramway extension from Wari Bunder to the Sewri Cotton Depot affords facilities to the majority of the travelling public |

SCHEDULE to letter No. CNM 17802 33 of 18th December, 1933—contd.

Ultimate Tramway System, as foreseen in Report to Bombay Developments Committee in 1914

Extensions between

Position in 1933

6 Tardeo Worth via Hornby Vellard, and ultimately, after Love Grove has been removed, to a point near Mahim Woods

Lardeo Road from our present Tardeo Terminus to Hornby Vellard has still not been widened. Consequently it has been impossible to lay a double tramway track on that road. The construction of tramways along Hornby Vellard to the Mahim Woods has not ever been considered necessary or desirable.

6 Girgaum and Gowalia Tank via Kennedy Bridge

In place of this extension, the existing tramways in Grant Road were extended to Gowalia Tank in April 1924, as the Kennedy Bridge is not of sufficient strength to carry even an Omnibus.

7 Vincent Road from present Parel Terminus to proposed King's Circle

This extension from Suparibag Terminus along Kingsway to Tilak Road was constructed in February, 1916. Our application to extend this tramway to King's Circle was submitted to the Municipal Commissioner in July 1933.

ADDITIONAL LINES PROPOSED BY COMMITTEE

From the Northern end of DeLisle Road along the projected 100 foot road to the Bandra Causeway

The question of providing transportation facilities in this area is dealt with fully in our covering letter of date

From Sewri Station on G. I. P. Harbour Branch Railway, along the proposed road past Parel Tank, the old Government House, Parel, Tramway Terminus, and over the new Elphinstone Road Bridge to link up with the Bandra Causeway Extension.

The proposed road from the Harbour Branch Railway to our Parel Terminus has not at present been completed sufficiently to warrant the consideration of providing thereon transportation facilities of any description.

facilities, and that the programme then drawn up has been worked to as closely as the road system allowed and traffic justified.

" But we suggest to the Municipal Corporation that striking developments have taken place in transportation practice, which have to be considered in relation to the recommendations of the Bombay Development Committee, if transportation services in this City are to be fully abreast of the times. The motor omnibus has fully established itself as one of the essential means of transportation. The trackless trolley has developed to a remarkable degree, and under certain conditions provides a flexible and silent conveyance. This Company has already established an omnibus service supplementary to its tramways, which is regarded as efficient and is greatly appreciated by the public. We are convinced from long experience of conditions in Bombay, and a careful study of transportation organisations in other parts of the world, that in zones of dense traffic no present alternative means of transportation will give the public the same facilities at the very low fares as tramways. But, when extensions are under consideration, the respective merits of tramways and of motor omnibuses and of trackless trolleys have to be carefully weighed.

" In the light of this experience, we are convinced that in areas such as Mahim and Worli the laying of tramways could not possibly be justified in present circumstances. Moreover the conditions obtaining, and likely to obtain for some years to come, are markedly different from those which influenced the Development Committee in 1914. They then anticipated a rapid and continuous increase in the population, and its expansion northwards. The extent and severity of the present depression in the City must be vividly before the Municipal Corporation; it compels this Company to be cautious in embarking on a heavy fixed expenditure to meet developments which may be arrested, or never take place. This applies with special force to the extension of the Tramway System. The present Municipal requirements demand a standard of construction costing at least Rs. 2 lakhs per mile of permanent way, double track, in comparison with a cost of Rs. 1 lakh when the programme of the Development Committee was accepted.

" As the Municipal Corporation is aware, the Company is prepared to construct extension No. 2—along DeLisle Road, from Byculla Bridge to Elphinstone Cross Road—as soon as the road is sufficiently widened throughout to permit of the laying of a double track; it is at present admittedly too narrow for the purpose.

" But as an alternative to that scheme, the Tramways and Telephone Committee has recommended the Corporation to accept the offer of the Company to run an experimental

motor omnibus service from King's Circle *via* Parsi Colony, Tilak Bridge, along Bhawanishanker, Gokhale and DeLisle Roads to Byculla Bridge. As soon as the new omnibuses, now nearing completion, are available to replace vehicles now running on other services, this service will be established. I am desirous to invite the attention of the Corporation to the value of an experimental motor omnibus service in testing the traffic possibilities of any route; estimates however carefully framed cannot be so reliable as a practical test. An omnibus service gives reliable figures, and indicates whether a route is commercially practicable, and whether it should be varied in the public interest, before any large sum is invested in the fixed works involved in laying a tramway track.

"With regard to Scheme 3, the Company will give favourable consideration to the practicability of extending the tramway service to the South of Hornby Vellard, from our present Tardeo Terminus, as soon as Tardeo Road is sufficiently widened to carry a double track.

"The experimental omnibus service from King's Circle to Byculla Bridge mentioned above, will provide data as to the traffic potentialities of the less densely populated parts of the Island lying to the West of the railway zone, between, say, the Race Course and the extreme North of the Island at the Southern approach to Mahim Causeway.

"Our investigations indicate that the traffic potentialities of that area are not, at present, such as will require more than a limited transportation service. Certainly that they will not carry a costly tramway service, for it could not in any circumstances meet the standing charges. For the time being we are convinced that the needs of this area will be best met by a motor omnibus service, and may, as development proceeds, justify a trackless trolley system. Our plans provide for the proving of this area by a motor omnibus service, which will be initiated as soon as the necessary vehicles are available."

(Schedule referred to on next page.)

SCHEDULE to letter No. CNM/17802 33 of 18th December, 1933—contd.

Ultimate Tramway System, as foreseen in Report to Bombay Developments Committee in 1914.

Extensions between

Position in 1933.

5. Tardeo—Worli *via* Hornby Vellard, and ultimately, after Love Grove has been removed, to a point near Mahim Woods
6. Girgaum and Gowalia Tank *via* Kennedy Bridge.
7. Vincent Road from present Parel Terminus to proposed King's Circle

Tardeo Road from our present Tardeo Terminus to Hornby Vellard has still not been widened. Consequently it has been impossible to lay a double tramway track on that road. The construction of tramways along Hornby Vellard to the Mahim Woods has not ever been considered necessary or desirable

In place of this extension, the existing tramways in Grant Road were extended to Gowalia Tank in April, 1924, as the Kennedy Bridge is not of sufficient strength to carry even an Omnibus.

This extension from Suparibag Terminus along Kingsway to Tilak Road was constructed in February, 1916. Our application to extend this tramway to King's Circle was submitted to the Municipal Commissioner in July, 1933.

ADDITIONAL LINES PROPOSED BY COMMITTEE

From the Northern end of DeLisle Road along the projected 100 foot road to the Bandra Causeway.

The question of providing transportation facilities in this area is dealt with fully in our covering letter of date.

From Sewri Station on G. I. P. Harbour Branch Railway, along the proposed road Past Parel Tank, the old Government House, Parel Tramway Terminus, and over the new Elphinstone Road Bridge to link up with the Bandra Causeway Extension

The proposed road from the Harbour Branch Railway to our Parel Terminus has not at present been completed sufficiently to warrant the consideration of providing thereon transportation facilities of any description.

As recommended by the Tramways Committee, the Corporation decided by their Resolution No. 94, dated the 10th May, 1934, to record the matter relating to the tramway extensions referred to above with the exception of extension No. 5 (Tardeo Worli). With regard to this, the Commissioner was asked to take up the matter again and enquire whether in view of the recent improvement of Tardeo Road, it would not be possible for the Company to introduce either a single line tramway service or to run a bus service on that route.

On 19th July, 1934, the Acting General Manager replied as follows :—

“ With reference to your reminder No. CESR/1199, dated 18th July, 1934, we have the honour to inform you that, while willing to meet with the wishes of the Corporation, we regret we have not the necessary vehicles at the moment.

“ We have, however, 12 omnibuses on order. When these become available for service, we propose applying to the Licensing Authority for permission to run an experimental omnibus service between Tardeo and Mahaluxmi. We consider that this route will better meet the needs of the travelling public in this area.”

We extended our Omnibus Service, Route ‘ B ’ (Ballard Pier to Warden Road) to Tardeo, *via* Warden Road, Mahaluxmi Temple, Hornby Vellard and Tardeo Road for a trial period of three months from 11th November, 1934. As a sufficient number of passengers used this service, it was continued after the trial period.

21. Extension of Tramway from Mazagon Terminus along Mount Road to its Junction with Victoria Road.

The Municipal Corporation by their Resolution No. 586 of 13th December, 1934, requested the Tramways and Telephone Committee in consultation with the Commissioner and the Company to report on the feasibility of extending the tramway lines from its present terminus at the junction of Mazagon Road and Matharpakhadi Road along Mount Road upto its junction with Victoria Road in order to meet the demand of the growing population in that locality.

The General Manager by his letter, dated the 25th February, 1935, replied that it was not feasible, under the existing circumstances, to make the proposed extension, as it would

infringe the Corporation Resolution No. 2963, dated the 25th September, 1905, which required that the Company should allow 16 feet clear for other traffic on either side of the tram cars. This meant that roads in which tramways were to be laid should be 49 feet in width (Track centres 9', width of tram car 8' and two clear ways $32' = 49'$). Mazagon Road was throughout its length wide between 31' to 40' only. Unless therefore the road was widened, it was not feasible to construct this extension.

22. Proposed Circular Tramway Single Track round the Museum Crescent.

The following letter was addressed by Mr. Rimington to the Municipal Commissioner on 3rd April, 1918:—

"I have the honour to apply for the sanction of the Municipal Corporation to our laying a circular single tramway track around the Museum Crescent as shown on the plans submitted herewith in triplicate.

"The advantages to the public and to the operation of the tramway traffic which will result from this extension are briefly as follows:—

"1. It will do away with the present double tracks between Watson's Hotel on the western side, and the Scotch Church on the eastern side, and the north end of the Colaba Causeway (opposite the Majestic Hotel) and substitute two lines in this region—congested with other vehicular traffic at some hours of the day—instead of four lines there as at present.

"2. On the two new single tracks thus substituted cars will run in one direction only instead of in both directions as on the two existing double tracks.

"3. It will abolish the present extensive reversing of cars from the Museum Siding and the crowding of cars which now takes place on that siding and, while entering and leaving it, on the Esplanade Road opposite the building at present used for the Freeman-Thomas Hospital. As soon as we are able to make the much needed additions to our present rolling stock this evil will intensify, and it will, in fact, then become practically impossible to deal with the increased number of cars which would have to be reversed from the said siding.

"As part of the scheme of improvements it will be seen from the plan that we propose to lay a connecting curve of single track round one side of the Wellington Fountain and to place a shelter for tramway passengers between that curve and the Museum Siding. The object of this curve

is to enable cars to be run locally between that point and the tramway terminus at Colaba and so improve the regularity of the service over that section

" Generally, the primary purpose of the proposed re-arrangement of our lines is to permit of the free circulation of cars all moving in one direction and so enable a larger amount of rolling stock to be operated without the present congestion and delays, with far greater convenience to other street vehicular traffic, and with much benefit to the Company's passengers by the improved regularity and speed of the tramway service

" The plan has been seen and approved by the Commissioner of Police and by the Executive Engineer, Municipality, provisionally subject to the sanction of the Corporation and the approval of Government

" The Company has in stock the rails and other material necessary to carry out this extension

" I shall be grateful if the Corporation can give to this matter their early consideration "

The Corporation approved of the proposal in July, 1918.

23. Charni Road—Doubling of Tram Tracks.

The application for the Charni Road improvement (which was postponed by the Board in May 1909) was renewed on 30th September 1909. The Managing Director's letter was as follows :—

" With further reference to my letter No. 810 of the 18th February, and to Executive Engineer's report No. G/17418 of the 27th March and to our letter No. 2339 of the 26th May in which it was intimated that my Board had postponed application for the Charni Road improvement, I have now the honour to submit in triplicate copies of our drawing No. B. 1412, showing the proposed alteration at our present Girgaum Terminus, which I am now anxious to proceed with. I trust you will, therefore, be kind enough to obtain the sanction of the Corporation to this work at the earliest possible date.

" At the present time much delay and inconvenience to the public using our cars is caused by the block of cars at the Junction of Charni Road with Girgaum Road owing to the single line and " turn-out " at this spot.

" We propose to postpone applying for sanction to double the remainder of the track in Charni Road until the intended Municipal set-back on the right hand side of the street has been completed."

This was approved by Corporation Resolution No. 5565 of 20th December, 1909.

" I will recommend my Directors to carry out the work provided the Corporation is prepared to pay us the extra cost of the Permanent Way and Overhead equipment, viz., £1,242."

This estimate included the capitalisation of the extra maintenance and establishment charges in addition to the estimated contractor's charges. On this offer further negotiations took place which resulted in the Tramways Committee stating that they were quite prepared to recommend the Corporation to bear half the cost as estimated by the Company, viz., £621. This the Committee did on the grounds that although the proposal for improving the Bhatia Baug and consequently relaying the tram tracks had issued from them in the first instance, still the general arrangement was as much in favour of the Company and their lines, as in favour of the city, it being unquestionable that the present arrangement of the Bhatia Baug would cause an ever increasing congestion of traffic which would re-act quite as unfavourably upon the Company as upon the Bombay public.

Mr. Chanter, however, informed the Municipality that he was unable to accept the proposal that the Corporation

should bear only half the cost ; but he simultaneously reduced his estimate from £1,242 to firstly £1,000 and lastly to £800. The Tramways Committee, being earnestly desirous of arranging the matter, decided that they would recommend the Corporation to pay half the actual excess cost not exceeding £500, but this proposal Mr. Chanter found himself unable to approve (July 1907).

After further negotiations, the matter was settled and the Corporation passed the following resolution on 30th January, 1908 :—

No. 6777. " That the Ad-interim Report, dated the 24th December, 1907, of the Committee appointed by Corporation Resolution No. 2279, dated the 17th August, 1905, and reconstituted by Corporation Resolution No. 514, dated the 29th April, 1907, regarding the improvement of the Bhatia Baug and the re-alignment of Tramway Lines in its vicinity, be approved and adopted, and a copy be forwarded to the Commissioner with a request that he will address Government as recommended in para 3 of the report and inform the Tramways Company that subject to the consent of Government being obtained to the area occupied by the Bhatia Baug being utilised for the purposes of the proposed improvement, the Corporation will be prepared to sanction the payment to them of a grant not exceeding a sum equivalent to £500 in consideration of the excess cost to be incurred by the Company for carrying out the re-alignment of the tram tracks in the vicinity of the Bhatia Baug as shown on the plan received with the report."

The work was not taken in hand by the Company as it had certain differences with the Municipality as regards several items. The question was protracted till 1910, when it was resolved by the Corporation on 24th November, 1910, as follows :—

No. 5296. " That the Third Report, dated the 27th October 1910, of the Committee reconstituted by Corporation Resolution No. 516, dated the 25th April 1910, regarding the improvement of Bhatia Baug and the rearrangement of the Tramway lines in its vicinity, be approved and adopted and a copy be forwarded to the Commissioner with an intimation that in modification of Corporation Resolution No. 6777, dated the 30th January, 1908, the Corporation approve of the revised arrangement for the alignment of the tracks shown on the plan received with the Report and desire that the Tramways Company be asked to proceed with and complete

the work, within three months on the understanding that the Corporation are agreeable to the following conditions:—

1. The Municipality to pay to the *Tramways Company* on the completion of the work the sum of *seven thousand five hundred rupees* as a contribution towards the cost of the alterations.
2. The Municipality to repair the road surface on the abandoned section of the line free of cost to the Company.
3. The Municipality to clear a way through Bhatia Baug removing trees, railings, etc., leaving the clear way at a level corresponding to the adjacent road surfaces.
4. The Tramways Company to be allowed to use the adjacent portions of the Bhatia Baug for the purpose of storing materials during the progress of the work free of charge."

The above alterations were carried out by the end of the year. The actual expenditure amounted to £ 1,292 out of which a sum of £ 500 was paid by the Corporation.

2. In 1912 a new scheme was in contemplation for the treatment of the Bhatia Baug Garden and certain necessary re-arrangements of our track were discussed during the early part of the year, the total cost of which was estimated at something in the neighbourhood of a lakh of rupees. This figure was more than the Corporation could see their way to expend. Mr. Cooper negotiated with Mr. Wittet, the Government Architect and with the Municipal Engineer with the result that they all agreed upon a scheme which it was thought the Municipality would in all probability be prepared to pay for.

The main points in connection with the re-arrangement scheme which called for comment were :—

1. That the terminal siding arrangements now situated in the Garden will be replaced by two separate sidings, one opposite the main entrance of the New G. P. O. and the other at the corner of the maidan opposite the Municipal Buildings. There seems to be no great objection to this from a Traffic point of view, in fact in some ways it will be a distinct advantage especially when the new Docks are opened.

2. That the re-arrangement does away with the possibility of running Circle cars along Cruickshank Road and Hornby Road cars along the Market route. This point has been the subject of much discussion between us and we have come to the conclusion that so long as the Municipality will provide island pavements and shelters at the new main Transfer point opposite the G. I. P. Offices the disadvantages of sacrificing the cross route running will be more than counter-balanced by the undoubted advantages and simplicity of the new layout. I enclose you herewith a copy of Mr. Lucas' notes upon the matter which will give you in detail the various pros and cons from the Traffic point of view.

The following letter, dated the 5th August 1912, was accordingly addressed by Mr. Cooper to Mr. James W. Mackison, the Executive Engineer, Bombay Municipality :—

" With reference to our recent correspondence and interviews I now have pleasure in putting before you a scheme for the re-arrangement of our tracks in the vicinity of Bhatia Baug which I am prepared to recommend for the consideration of my Board.

" I enclose you herewith in duplicate copies of our plan No. B. 2550, showing the re-arrangement now proposed and also of our Plan No. B. 2081, showing the present layout of our tracks and sidings in the neighbourhood of Bhatia Baug.

" Should the proposed re-arrangement meet with the approval of the Corporation I am prepared to recommend my Board to carry out the work at the earliest favourable opportunity upon the following terms:—

1. The Municipality to pay to this Company the actual cost of the work plus $7\frac{1}{4}$ per cent. thereon for Supervision and Establishment Charges, such total payment however not to exceed Rs. 60,000. A payment of Rs. 30,000 to be made upon commencement of the work and the balance upon completion.
2. The Municipality to repair the road surface of the abandoned sections of line free of cost to the Company.
3. The Municipality to clear away any trees, railings, etc. along the routes of the new tracks and sidings leaving a cleared way at a level corresponding to adjacent road surfaces.
4. The Municipality to provide the Company free of cost with such land either on the existing Bhatia Baug Garden or by arrangement with Government upon

the adjacent portion of the Maidan as may be necessary for the purpose of storing materials, etc., in connection with the alterations.

5. The Municipality to form at their own cost the three island pavements required for transfer passengers opposite the main entrance to the offices of the G. I. P. Railway Company.

"The proposed re-arrangement of tracks deprives us of the possibility of running through services across Borj Bunder Junction as at present from the Fort Market Route along Cruickshank Road to Kalbadevi and Girgaum, and from the Hornby Road Route to the north via Crawford Market, and we could not consider the loss of these facilities to our passengers without the provision of proper shelters at the proposed new Transfer Station at Borj Bunder. I have therefore provided a sum in our estimate to cover the cost of shelters to be erected to a design which has been kindly prepared by the Consulting Architect to Government.

"I have pleasure in handing you herewith an approximate outside estimate of the cost of the work and shall be glad to go further into the matter with you should you so desire."

The Board approved the proposals subject to the retention of through running facilities between Hornby Road and the Market. The Corporation at their meeting, held on 6th February 1913, approved of the track alterations being carried out in accordance with the conditions set out in Mr. Cooper's letter of 5th August 1912, *supra*. The only modifications suggested by the Corporation were :—

1. A slight alteration of the curve running round the south side of the new Garden.
2. The omission of the two side island platforms at the central Transfer Junction.

The meaning of the Corporation Resolution was explained by the Municipal Commissioner in his letter of 26th February 1913, addressed to the Company. He writes as follows :—

"I understand that you will first lay down the new siding in Fort Street and after that the siding in the cross road behind Tata's Statue and that when you have done this you will be able to remove the existing tram lines from the proposed garden area and lay them from Mint Street to Hornby Road as shown in the approved plan, and that you will complete the Crossings during the cold weather. I shall address Government to obtain a strip of land from the

Maidan required for the Siding behind Tata's Statue and this land should be obtained in time for you to begin work when you have completed the Fort Street siding."

It may be noted that one of the recommendations made by the Tramways Committee and approved by the Corporation was that the total amount of actual cost to be paid by the Municipality to the Company should not exceed Rs. 60,000.

The following letter was addressed by the Municipal Commissioner on 3rd March 1913 to the Chief Secretary to Government, Revenue Department, Bombay, for grant, free of cost, to the Bombay Municipality of a strip of land from the south-east corner of the Esplanade Maidan required for the construction of a siding for tramway lines :—

" I have the honour to state that the Corporation have sanctioned the laying out of the Bhatia Baug area in accordance with the suggestions of Mr. Wittet and arrangements are being made to re-arrange the Tramway lines in the vicinity. One of the necessary changes will be the provision of a siding in the space alongside the road behind the statue of the late Mr. J. N. Tata. I forward a plan showing in red the portion of the Maidan which is in the possession of Government on which the siding is proposed to be constructed. I may state that this siding will not encroach upon any part of the Maidan that is used for recreation but will take up a portion only between the wells and the road and will not interfere with the use of the former though it will occupy some of the space now covered with stone pavement round the wells. In consideration of the fact that the proposed alterations are being made in consequence of the desire of the Corporation to improve the appearance of the area round the Victoria Terminus and that the improvement will cost a considerable sum of money, I have the honour to request that Government will be pleased to give the ground free of charge to the Corporation for the use of the B. E. S. & Tramways Company Ltd. on condition that should the ground cease to be used as a siding, it shall be returned to Government, the damage that may have been caused to it being made good."

The Chief Secretary to the Bombay Government then addressed the following letter to the Secretary, Government of India, Department of Revenue and Agriculture, on 10th June 1913 :—

" With a view to improving the appearance of the area around the Victoria Terminus Station, the Municipality of Bombay have sanctioned a scheme prepared by the Consulting Architect to Government for laying out an open

space called Bhatia Baug and for re-arranging the Tramway lines in that vicinity. In furtherance of this scheme the Municipality have applied for the grant free of cost, of a strip of land at the south-east corner of the Esplanade Maidan, which is required for the construction of a tramway siding. The strip is shaded red on the accompanying plans and measures 1,233.33 *square yards*. Its market value is Rs. 49,333 calculated at Rs. 40 per square yard. The siding will not encroach upon any part of the Maidan used for recreation purposes. It will take up a portion only between the wells and the road as shown on the plans, and will not interfere with the use of the wells though it will occupy some of the space now covered with the stone pavement round them. In consideration of the fact that the Municipality are incurring considerable expenditure in effecting this very desirable improvement the Governor in Council recommends that the grant of the land required for the Tramway siding may be sanctioned, free of cost, subject to the following conditions :—

- (a) that the drainage of the two wells shall be connected with the Municipal sewer by the Municipality at their own expense ;
- (b) that the stone platform of the wells shall be re-constructed by the Municipality and the surplus stones handed over to the Executive Engineer, Presidency District;
- (c) that the land shall be liable to be resumed by Government if used for other than the specific purpose for which it is granted ;
- (d) that should the land be at any time resumed by Government no compensation shall be paid to the Municipality or the expenditure incurred by them in laying the siding and in restoring the ground to its original state ;
- (e) that no structure, either temporary or permanent, shall be erected upon the land without the previous sanction of Government.

" I am accordingly to ask for the sanction of the Government of India under paragraph 2 of their Resolution in the Department of Revenue and Agriculture No 1-127-4 of 28th February 1912.

" 2. I am to request that the plans forwarded with this letter may be returned in due course."

The Government of India sanctioned the grant in the following letter addressed by them to the Bombay Government :—

" In reply to your letter No. 5476, dated the 10th June 1913, I am directed to say that the Government of India sanction the grant, free of cost, to the Municipality of Bombay

of a strip of land at the south-east corner of the Esplanade Maidan, measuring 1,233.33 square yards and valued at Rs 49,333, which is required for the construction of a tramway siding.

" 2. The grant will be subject to the conditions mentioned in paragraph 1 of your letter. Should sanction be granted at any time to the erection of any structure under condition (c), I am to ask that it may be arranged at the time such sanction is given that the compensation payable for the structure, if the property is at any time resumed by Government, shall not exceed the amount laid down in paragraph 2 (2) of Finance Department's Resolution No. 914-A, dated 19th February 1902.

" 3. The plans received with your letter are returned as requested."

A nominal rent of Rupee one for the use of the land is charged to the Company with a view to secure the full rights of the Municipality over the land.

3. On 28th November 1913, the Joint Managing Engineer addressed the following letter to the Executive Engineer, Municipality, in connection with the alignment of the tracks which the Company proposed to lay opposite the Victoria Terminus :—

" I have the honour to enclose herewith triplicate copies of our Drawing No. B. 2821 which show the alignment of the tracks we propose to lay opposite Victoria Terminus Station during the Xmas holidays.

" You will recollect that since the Corporation sanctioned the layout shown on Drawing No. B. 2550 amended, certain alterations have been made in the position of the Bhatia Baugh Garden and in the portions of the tramway realignment already completed, in consequence of certain modifications of traffic conditions at the Railway Station. Further, from the experience gained since the adoption of the realignments above referred to, we find that it would be more convenient for all our passengers to transfer opposite the Empire Theatre, and by slightly rearranging the proposed layout, the Island and Shelter, which were to have been erected in the centre of the open space in front of Victoria Terminus, can now be dispensed with, and can be placed more conveniently just south of the junction of Murzban Road and Hornby Road as shown on the Drawings sent herewith.

" *Our Drawing No. B. 2821 differs but slightly in other respects from Drawing No. B. 2550 amended, and we do not think it necessary to call your special attention to any other details.*

" We trust you will kindly notify us promptly, that we may lay the tracks as now proposed. We hope to start platelaying work about the 20th December and complete it early in the New Year."

This alignment was a slight modification of that sanctioned by the Corporation. The chief modifications involved were as follows :—

- (a) It was proposed to abandon the idea of constructing a shelter opposite the Victoria Terminus and in its place to provide a refuge at the Transfer Station opposite the corner of Murzban Road.
- (b) The track was to be re-aligned so as to be in the centre of the fair way rather than at one side.

This was approved by the Corporation Resolution No. 5547 of 15th December 1913.

When the work was completed, we charged and the Municipality paid us the maximum sum of Rs. 60,000 stipulated by them.

SCHEDULE OF TRAMWAY EXTENSIONS.

From 9th May 1874 to 31st December 1935.

SECTIONS.		DATE OF OPENING.	ROUTE MILEAGE
1	Grant's Bldgs. to Pydhonie (<i>Via</i> Cr. Market).	May 1874	2.522
2	Bori Bunder to Pydhonie (<i>Via</i> Kalbadevi) ..	May 1874	1.256
3	Pydhonie to Byculia Bridge	Apl. 1875	1.218
4	Apello Bunder to Bori Bunder (<i>Via</i> El. Circle)	Mar. 1876	1.281
5	Sassoon Dock to Grant's Buildings	Jan. 1878	0.449
6	Dhobi Talao to Girgaum	Jan. 1878	1.100
7	Pydhonie to Grant Road Terminus	Dec. 1881	1.187
8	Dhobi Talao to Wari Bunder	May 1882	1.700
9	Byculia Bridge to Lal Bag	May 1886	1.500
10	Fort Market to Cainac Bunder	Dec. 1886	0.986
11	Corner of Grant Road to J. J. Hospital ..	Nov. 1892	0.585
12	J. J. Hospital to Hancock Bridge	May 1894	0.456
13	Corner of Grant Road to Foras Road	Mar. 1895	0.260
14	Null Bazar to Jacob's Circle	Apl. 1895	1.653
15	Crawford Market to Masjid Bunder Road ..	Apl. 1895	0.423
16	Foras Road to Lamington Road	Dec. 1895	0.121
17	Hancock Bridge to Mazagon Terminus	Apl. 1896	0.473
18	Null Bazar to C. P. Tank	July 1896	0.207
19	Lamington Road to Tardeo Terminus	Apl. 1907	0.300
20	Lal Bag to Patel Terminus (Elphinstone Rd.)	Aug. 1907	0.958
21	Girgaum to Byculia Bridge	Nov. 1907	1.720
22	Parel Terminus to Dadar	June 1917	1.200
23	Girgaum to Opera House	Jan. 1919	0.179
24	Esplanade Road (Flora Fountain to Dhobi Talao)	Dec. 1919	0.840
25	Sandhurst Road	Apl. 1920	1.762
26	Reay Road (Frere Road Terminus to Victoria Road Overbridge)	Apl. 1921	1.135
27	Tank Bunder (Victoria Road Overbridge to the Cotton Depot)	Oct. 1923	0.883
28	Grant Road Terminus to Gowalia Tank ..	Feb. 1926	0.545
29	Mahomedalli Road (<i>Palton Road to Bhendi Bazar</i>)	Mar. 1931	0.968
30	Dadar to King's Circle (Matunga)	June 1935	0.927
Sidings, Loops and Junction Curves ..			2.083
Total Length of System ..			30.877



TRAILER IRANI GAR

CHAPTER 7.

Rolling Stock—Electric Cars.

In 1905, an order was placed with the Brush Electrical Engineering Co., Ltd. in London to build two sample cars for the Company. These were shipped by "Clan Manzie" on 21st December 1905, arriving in Bombay a month later. One of these was a single deck car and the other was a double deck car. The sitting accommodation in the single deck car was reduced from 50 to 40 in Bombay.

Between 16th July and 1st August 1906, orders for the following cars were placed with the Brush Electrical Engineering Co., Ltd. :—

- | | | |
|----|--|---------------|
| 15 | Double class cars complete with electrical equipments and bogie trucks, of all teak construction, but not including seats, boxed for shipment f o b London or Liverpool including erection complete at Bombay, but exclusive of ocean freight, customs or landing charges each | £750 |
| 15 | Single class cars | do do do £730 |
| 30 | Double motor equipments with double bogie trucks and all hand brake gear complete including erection in Bombay (for use with the car bodies being manufactured by the Bombay Co.) boxed for shipment f o b London or Liverpool, but not including ocean freight, customs and landing charges, each | £409. |

Seating capacity of double class cars was to be 48 (16 for 1st class and 32 for 2nd class passengers) and that of single class cars 52.

The above orders were to be carried out before 31st December 1906.

On 30th January 1907, the work of supplying 40 Double Motor Equipments complete with double bogie trucks (with all the conditions of the first order) was entrusted to the Brush Electrical Engineering Co., Ltd.

An order to the Brush Company for the following car bodies and equipments was made on 27th November 1907 :—

- | | | |
|----|---|------|
| 25 | car bodies Type A (closed pattern) fitted with ordinary standard brakes, each | £274 |
|----|---|------|

- 25 car bodies Open Type C, fitted with Peacock brakes, each £295-10.
- 50 electrical equipments (specification as before with the exception that 5 point controllers were required), each £297.

All these were to be delivered and erected complete in Bombay; ocean freight, insurance and delivery to site being paid by the Company at actual cost.

The Board decided on 15th September 1908 to abolish the First Class compartments. The composite cars were therefore converted into Single Class cars as they came into the shops for the annual overhaul.

In 1910 we were faced with an increasingly difficult problem of dealing with a heavy tramway traffic during the morning and evening rushes to and from the Fort Office District, and it was the opinion of the Management that all additions to this rush traffic could be best dealt with by Trailer Cars attached to the ordinary service cars. The Corporation was approached in the matter and they approved of Trailer Cars being permitted to be used as an experimental measure for six months (16-5-1910). The Board therefore sanctioned two Trailer Cars to be built. They ordered 8 more such cars to be built. The first two were put into service on 1st July 1910. The Corporation on 17th October 1910 removed the imposition of the time limit. The Company was therefore free to use either Trains or Trailers.

On 17th January 1912, the Company applied to the Municipal Commissioner for permission to our running experimentally for a period of six months a train consisting of three single-truck cars linked together. It was intended that this three car train should consist of a motor car at each end and a motorless car placed between the two, so that it could run from either end. This proposal was objected to by the Police Commissioner and the Municipal Commissioner rejected it on the ground that the width of Bombay streets would not allow of 3 car train being used (6-3-1912).

STANDING ACCOMMODATION.

In May 1912, Mr. Cooper suggested that we should make a trial of creating a certain amount of standing room in our bogie cars in order to increase their capacity for rush hour

traffic. He accordingly obtained the permission of the Municipal Commissioner to close up the centre entrances of 4 cars and to allow standing in the centre gangways of 2 of them and to take out 4 of the fixed seats in each of the other two cars so as to form square standing compartments in the centre. Mr. Cooper on 4th May 1912 wrote to the Managing Director as follows :—

" We have had these cars in use for 3 or 4 weeks now and there is no doubt as to the utility of those with the large standing compartments. The alteration increases the rush hour capacity from 54 to 79 without encroaching on the gangways between the seats which I should propose always to keep clear. Many passengers have expressed satisfaction at the innovation, as they would far rather stand in a car for a mile than wait in the roadway for a car with a vacant seat. Indeed unless we find any special disadvantage during the monsoon I am strongly in favour of converting the whole of our bogie cars in this way and thus increasing our rush hour passenger capacity by 2,500 i.e. by over 20 per cent.

" I have seen the Commissioner again on the matter and asked him whether he considered that this alteration would require the sanction of the Corporation since our "carriages have only to "be of a construction approved by the Municipal Commissioner." He said that the matter had better be brought before the Tramways Committee in due course, but meanwhile he sanctioned the number of trial cars being increased to ten, so I propose to convert a further six cars as soon as possible and have them carefully watched for a couple of months during the monsoon. Should we find no serious disadvantage I should like to apply for sanction to convert the remaining ninety in time for next cold weather's traffic and I should, therefore be glad if you will kindly bring the matter before the Board.

" The cost will be roughly Rs. 40 per car.

The advantages are :—

1. We shall increase our rush-hour capacity by over 20 per cent. and therefore avoid sending out such a large proportion of morning and evening cars.
2. We shall put off the time when Borj Bunder Junction will fail to cope with any additional office traffic and when we shall be forced to consider a second route between Flora Fountain and Money School.
3. We shall do away with our centre entrances which are responsible for about 75 per cent. of our personal accidents."

Mr. Rimington applied to the Municipal Commissioner on 1st February 1913 for sanction to our permanently adopting standing compartments in all our Bogie Cars. On 28th

June 1913, the Corporation sanctioned our proposal upon the following conditions :—

1. That the sanction be for a term of 3 years from January 1st next, and that at the end of that term the Corporation shall have the right to call upon us to revert to the present arrangement should they consider that the public have been put to inconvenience thereby.
2. That the accommodation be limited to 10 standing passengers in each standing compartment.
3. That some improvement be made in the standing compartments as at present arranged.

The Board accepted these conditions but accorded permission to alter 40 cars only in addition to the ten cars which had already been altered, making in all 50.

The permission for standing accommodation was cancelled by the Corporation on 19th January 1914.

DOUBLE DECK CARS.

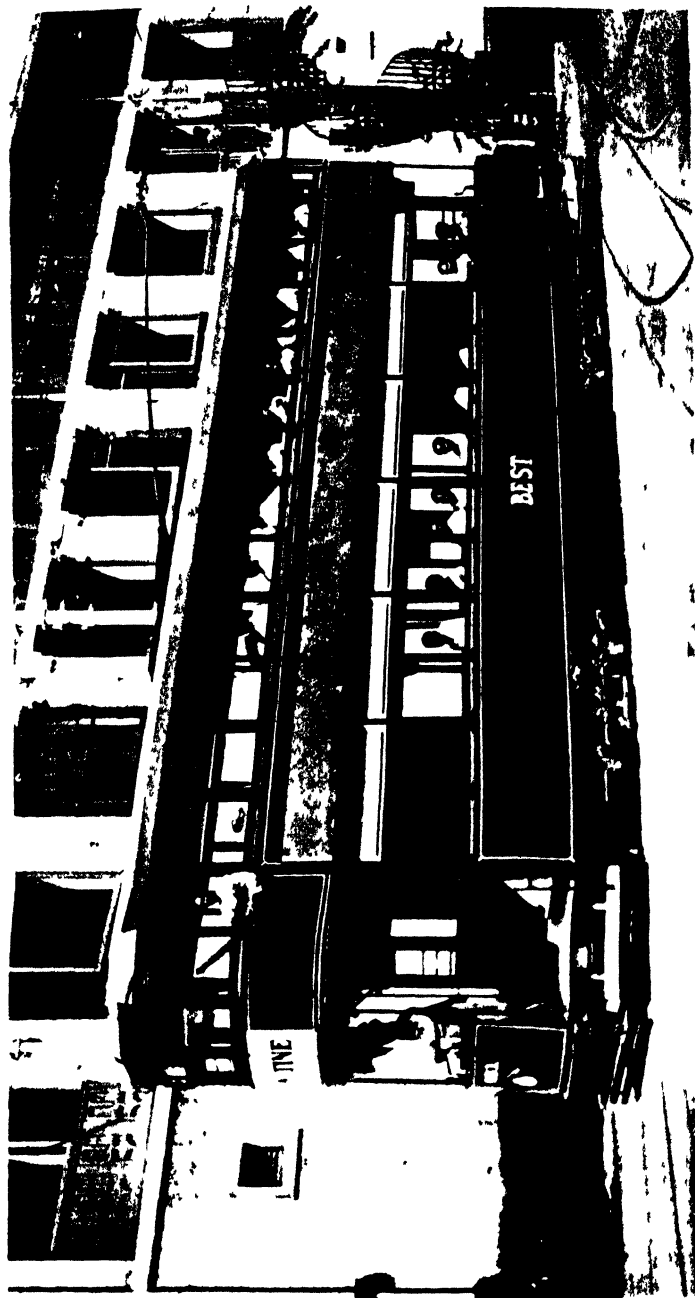
The Municipal Corporation on 28th April 1919 passed a resolution requesting the Company to introduce, if feasible, three or four double deck cars, as an experimental measure, in order to ascertain whether the congestion of traffic could be adequately relieved by the introduction of such cars. The Directors decided to introduce these and the Joint Managing Engineer was instructed to put in hand at once the construction of two double deck car bodies, one with merely a light roof over the top deck and the other with the top deck enclosed with windows, etc. These were put into service in September 1920.

Two more Double Deck Cars on the smaller car (Single Truck) Chassis were built and they were put into service in October 1920 on the same conditions as the two which were already running.

FIRST CLASS CARS.

The following letter was addressed by the Managing Engineer on 10th June 1921 to the Municipal Commissioner :—

" I have the honour to address you on the subject of re-



DOUBLE DECK TRAM CAR

" 2. Under Clause 15 of the Deed of Concession dated 7th August 1905 this Company is at liberty, with the approval and sanction of the Corporation, to institute a Tramway Service for the conduct of passenger traffic over the whole or any part of its system in two classes and to charge special fares, to be fixed with the sanction of the Corporation, for the conveyance of first class passengers.

" 3. The Corporation will recollect that in 1907 when the Electric Tramway System was first opened, a few of the larger cars were equipped with first class compartments, and fares of not more than two annas were sanctioned (vide Corporation Resolution No. 1076 of May 1907).

" 4. These first class compartments were not successful, chiefly because (a) they were so few in number that a sufficient and regular headway on long routes could not be maintained, and (b) the fares sanctioned were too low to restrict their use to the better class of passengers for whom they were provided. A shortage of rolling stock speedened their abandonment, and the first class compartments were converted into ordinary accommodation.

" 5. My Directors however feel that the time has come when a further experiment in running first class cars should be made, as they can now see their way to providing such an experimental service without restricting the accommodation provided for passengers paying the lower fare. They are of the opinion that a First Class Service would be welcomed by the better class of the travelling public as such a service has proved its popularity in other Eastern Cities.

" 6. They, therefore, request the sanction of the Corporation to the following experimental measures —

- (a) That 12 Single Truck cars be constructed similar in size to those now in use, but with a revised arrangement of seats. Such first class cars would be painted a distinctive colour and would be readily recognised.
- (b) When the above rolling stock is ready, that a 10 minute service of first class cars be inaugurated between Sassoon Dock and the Opera House at Girgaum via Bori Bunder and Dhobi Talao.
- (c) That this service be run daily from say 8 a.m. to 8 p.m. Standard Time.
- (d) That a uniform fare of annas three be charged for the whole, or any part of, the journey between the points specified above.
- (e) That direct tickets only be issued in such cars, and that the carriage of transfer passengers be refused therein, except on payment of a full First Class Fare.

" 7. If the experiment is successful, my Directors will be prepared to extend such a service gradually to other routes.

" 8. I am to add that a sample car will shortly be available for inspection by the Members of the Corporation."

To this the Tramways Committee recommended :

" That the Company's proposals be approved subject to the understanding that the 12 first class cars shall be provided out of the new rolling stock to be constructed by the Company and that this experiment of running separate first class units be tried for a year and that should this experiment fail the Tramway Company should consider the question of further trying the experiment either by converting some seats in the ordinary cars into first class seats or by connecting separate first class cars to the ordinary cars as trailers. As regards the proposal to levy fare of 3 annas per passenger on the first class cars the Committee recommend that the proposal be approved on the understanding that children between 3 and 10 years of age shall be charged half the rate, viz. 1½ annas and that children under 3 years shall be carried free of charge."

When this report went to the Corporation, they were of opinion that the first class cars running by themselves as recommended by the Committee could not prove a success. They therefore requested the Company "to arrange (1) that the first and second class cars run together and (2) that the fare for the first class should not exceed that for the second class by more than 50 per cent." (Vide Corporation Resolution No. 3774 of 31st July 1922). The matter was, however, shelved by the Board.

EXPERIMENTAL CAR.

As it was our desire to experiment, and after ascertaining the views of all concerned, to decide upon the type of tram car which was most likely to meet the needs of the travelling public of Bombay, we ordered out in 1931 a new car of the most modern type from the English Electric Co., Ltd. at a cost of about Rs. 57,000, with all the amenities of the present day requirements. After obtaining the approval of the Municipal Commissioner in terms of Clause 4 of our Deed of Concession, this new car was put into service in May 1932, and arrangements made to re-model all other rolling stock in accordance with this experience.

CHAPTER 8.

Fares on Tramways—General.

1906-1907.

The Managing Director, anticipating that the new tram cars (the plans of which were previously approved by the Municipal Commissioner and the Executive Engineer, Municipality) would commence running in April 1907 on the line between Colaba and the Parel Terminus, applied to the Municipal Commissioner on 8th November 1906 for sanction to a service in two classes and to charge special fares for the conveyance of passengers. His letter to the Commissioner was as follows :—

“ The 40 cars now under construction which will inaugurate this Company's electrical service are of two types : (1) 20 cars each seating 52 passengers all of one (the lower fare) class, 20 cars each seating 48 passengers of which 32 seats will be of the lower fare and 16 seats in a special 1st class compartment will be of a higher fare. These 40 cars will run on the line between Colaba and the north end of the Supari Baug Road (the terminus will be at the beginning of Vincent Road), which will be the first route to be opened to electric traction, and they will we hope commence running in April next. They will, therefore, supply seatage for 1,680 passengers of the lower fare, and 320 passengers of the higher fare and will provide a great deal more accommodation than is at present provided by the horse-cars on this route. The plans for these cars have been approved by you, and the Executive Engineer, Municipality, has seen and approved sample car-bodies which have been erected in our workshops for his inspection. I attach hereto block plans of both cars for the information of the Corporation. The seat space allotted to each passenger is 18 inches against 16 inches in the present horse-cars. All the seats are very comfortable being of polished teak, but those in the first class compartment are somewhat more luxurious, this compartment is partitioned off from the remainder of the car, and is fitted with glass windows on both sides. All the cars have glass windows at both ends but these will only be used during the monsoon. So soon as the trucks (which will be bogies) arrive from home we propose to send down a car of each type for the Corporation to see, but as tickets have to be ordered from Europe, and it takes some months to procure them, it is necessary to at once obtain the Corporation's sanction to the 1st class fare, and to report to it the fares to be charged in view of the extension of our lines beyond our present terminus at Lal Baug, Parel, and the extension from Girgaum to Byculla, *via* Charni, Foras and Clare Roads.

" Under Clause 15 of this Company's Concession, I have, therefore, the honour to apply for sanction to the following scale of fares for the 1st class accommodation which we are providing on a portion of the new cars :—

- (1) From the Company's present termini at Colaba, Girgaum and Wari Bunder to Pydhowni Junction or *vice versa*, or between any of these stations or any intervening points, a uniform fare of $1\frac{1}{2}$ anna.
- (2) From Pydhowni to the Company's present termini at Grant Road, Falkland Road, Jacob's Circle, Mazagon, and the proposed new terminus at Vincent Road, or *vice versa*, or between any of these stations or any intervening point, a uniform fare of $1\frac{1}{2}$ anna.
- (3) From any point in the area described in (1) to any point beyond Pydhowni proceeding north; and from any point in the area described in (2) to any point beyond Pydhowni proceeding south, a uniform fare of 2 annas.

" The introduction of two classes on any of our cars is in the nature of an experiment, but there appears to be strong demand for it and it is believed that here, as in Calcutta, it will supply a popular requirement and prove a great convenience. Should it, after a fair trial, not respond to these expectations, we shall abandon it, and should it on the contrary realise them to a greater extent than we anticipate the cars are so constructed that an increased number can be altered to supply it. The lower fare traffic must, however, always furnish the immense bulk of our business and the main source of our revenue, and the Corporation may be quite certain that ample accommodation to take full advantage of that traffic will, in our own interest, always be provided.

" Unless a substantial difference is made between the fares of the two classes the object aimed at in establishing the 1st class will be defeated. Consistently with accomplishing that object we have placed the fares as low as possible, and having regard to the distances they cover, and the superior accommodation provided, they will be recognised as extremely cheap. Unless they meet with the approval of the Corporation we must abandon the idea of maintaining a 1st class.

" I come now to the question of the alteration in fares necessitated by the Supari Baug Road extension. I propose to fix the fares from the Vincent Road terminus to Pydhowni and all stations north of Pydhowni and *vice versa* at 1 anna for the ordinary class, and, as stated above, at $1\frac{1}{2}$ anna for the 1st class. From Vincent Road terminus to all stations south of Pydhowni and *vice versa* the fare will be $1\frac{1}{2}$ anna for the ordinary class and 2 annas for the 1st class.

" Lastly, I have the honour to report for the Corporation's information that I propose fixing the fare from Girgaum Terminus to Victoria Gardens and *vice versa*, by the new extension *via*

Charni, Foras, Bellasis and Clare Roads, at 1 anna. From any point beyond Girgaum Terminus to any point beyond Victoria Gardens or *vice versa* the fare by this route to be 1½ anna.

"There will be no alteration in the fares over our existing lines, the uniform 1 anna fare from any one point to any other point upon them being maintained.

"I have the honour to point out that Clause XVI of the Bombay Tramway Act, which Act is still in force except where overridden by the special terms of the new Concession, gives this Company the right to charge fares at the rate of 1 anna per mile. This right is limited by the Concession only in the case of the then existing lines, as to which it is agreed by Clause 15 that the uniform 1 anna fare shall be maintained. The distance from the new terminus at Vincent Road to Sassoon Dock will be 6½ miles. We should under the Act be entitled to charge up to 6½ annas for this distance, but, as stated, I propose to fix this fare at 1½ anna."

In deference to the views expressed by the Tramways Committee, the Managing Director by his letter of 8th May 1907, submitted the following as the fares *via* our new extension from our present Girgaum Terminus to Byculla Bridge, *via* Charni, Foras and Clare Roads :—

"From Bori Bunder (Bhatia Bagh siding) to Lal Bagh (present Parel terminus) or *vice versa via* Girgaum by the new extension, one anna.

"From any point south of Bori Bunder to any point north of the Byculla Bridge *via* Girgaum by the new extension, one and a half anna.

"From any point north of Lal Bagh to any point beyond Charni Road *via* Girgaum and the new extension, one and a half anna.

"The fare from Lal Bagh (Parel) to Sassoon Dock (Colaba) by the direct routes, *viz.*, *via* Abdul Rehman Street or *via* Kalbadevi Street, will remain as at present one anna.

"The above fares relate to the ordinary class only. My proposals for the fares by the 1st class remain as submitted in my said letter of the 8th November last."

The Tramways Committee on 9th May 1907 *inter alia* reported as follows :—

"It appears that when submitting his proposals, the Managing Director of the Tramway Company was under a misapprehension as to the terms of the Deed of Concession in regard to the question of fares, for while he requested sanction to the institution of a tramway service in two classes and to the fixing of special fares for the conveyance of first class passengers, he simply reported

for the information of the Corporation the ordinary class fares proposed to be fixed in respect of the proposed extensions. Sub-Clause A of Clause 15 of the Deed however leaves no doubt whatever that such charges cannot be fixed without the approval of the Corporation. This was pointed out to the Managing Director at an interview which he had with a Sub-Committee of this Committee and it was admitted that the letter was written under a misapprehension.

"Coming to the specific proposals the Committee beg to inform the Corporation that they have represented to the Managing Director of the Company the great desirability of having a uniform rate of one anna fixed for the ordinary class and two annas for the first class from any one point to any other between Vincent Road and Colaba including the traffic on linked lines, the question of increase in the fare in respect of further extensions being for the present left over for future settlement. The Committee are glad to state that the Managing Director has undertaken to consult the Board of Directors on this point. As however it must take some time before the matter can be finally settled and as it is highly desirable in the interest of the public that there should be no delay on that account, it has been suggested by the Managing Director that approval may be provisionally given to the fares mentioned in his letter being charged with certain modifications up to the end of the current calendar year, by which time it is hoped the question of fixing uniform rates of fares for first and second class service will have been settled. Under the circumstances the Committee beg to recommend that under the terms of Clause 15 of the Deed of Concession sanction be given to the institution of a tramway service for the conduct of passenger traffic in two classes over the route specified in the Company's letter and that the special fares proposed by them be also provisionally approved as mentioned above, subject to the understanding that the ordinary class fares to be charged in respect of the undermentioned distances will be as shown below :—

- (1) From Lal Baug (the old terminus at Parel) to Colaba and *vice versa* by the direct route, one anna.
- (2) From Lal Baug to Victoria Terminus *via* Girgaum route and *vice versa*, one anna.
- (3) From Lal Baug to Colaba *via* Girgaum route and *vice versa*, one anna and a half.
- (4) From Victoria Garden to Colaba *via* Girgaum route and *vice versa*, one anna.

"It is understood that the fare for the lower class from any one point to any other within the existing termini would be one anna only and that the fare for first class service will not be more than annas two in any case. The Committee may explain that the reason why an extra half anna charge for the ordinary class has been allowed in respect of the new extension *via* Charni, etc., roads, is that the public will always have the option to travel over the

area comprised in the now existing lines by the direct route paying one anna only, the extra half anna being paid only if they chose to go by a circuitous route.

" In connection with this subject the Committee beg to inform the Corporation that they have got an assurance from the Managing Director that the same facilities as are now given to the public in regard to the free issue of all necessary transfers will be given in future and also that the most ample accommodation would be provided for the lower class traffic, the seating accommodation for the two classes being in the proportion of at least 84 for the ordinary class to 16 for the first class "

The Corporation adopted the report. (C. R. No. 1076 of 13-5-1907.)

1908.

As the period for which the Corporation sanctioned the levy of special fares for the conveyance of passengers for the two classes expired on 31st December 1907, the Municipal Commissioner by his letter of 30th January 1908 called upon the Company to send fresh proposals for the approval of the Corporation.

The Managing Director's reply to this was contained in the following letter dated 10th February 1908 addressed by him to the Municipal Commissioner :—

" In reply to your letter No. 34362 of 30th ultimo mentioning that the period for which the Corporation sanctioned the levy of special fares for the conveyance of passengers by two classes expired on the 31st December last and inviting fresh proposals from me regarding this matter, I have the honour to state that so far the introduction of 1st class compartments on a number of this Company's electric cars has not proved a success from the point of view of the Company's revenue. The percentage of passengers using these compartments has been small, and, so far as can at present be judged, they do not supply a public need. If, therefore, I had to decide the matter now, I should have to do so in the sense that the Company desires to discontinue the running of any cars with 1st class compartments, and to convert its composite cars already in service into cars with a single class.

" In view, however, of the following facts ; (a) that electric traction is new to Bombay ; (b) that it is at present only partially established on our lines ; (c) that two classes are an innovation on the tram cars here ; (d) and that on two of our lines, namely, the line to Parel and the line to Girgaum the use of the 1st class compartments seems to be slowly increasing, I am somewhat reluctant to abandon at once an experiment which under present circumstances can hardly be held to have had an adequate trial. I am prepared to recommend my Board to continue this experiment subject to the sanction of the Corporation and to its agreement to certain regulations which I herewith submit, until the 31st December next, before when the entire tramway will have been

electrified for a sufficient length of time to enable a decision to be reached as to whether or not it is advisable to entirely abolish the 1st class compartments.

“ From the experience already gained as to the limited extent to which the public patronize these compartments it has become manifest that there are some of the Company's lines, as for example the line between Cowasji Patel Tank and Jacob's Circle *via* Duncan and Ripon Roads and the line between the Frere Bridge and Mazagon Terminus *via* Grant, Babula Tank, and Mazagon Roads, where 1st class compartments if introduced would run practically empty. Moreover, the smaller type of car which has been approved by the Corporation, and which will run on these lines as well as the Frere Road line has no 1st class accommodation. This fact, together with the fact that even on the lines where it is proposed to retain them, the proportion of composite cars in service will probably be less than the proportion of single class cars, indicates the advisability of abolishing the issue of transfer tickets in the 1st class compartments and restricting the issue to direct tickets to stations to which the car, in which the 1st class ticket is sold, is itself proceeding. This seems the simpler and more straightforward arrangement inasmuch as the Company cannot guarantee that a passenger paying for a 1st class ticket and desiring to change on to another line will find another composite car available at the transfer junction. I shall be glad, therefore, to receive the sanction of the Corporation to this restriction which will apply exclusively to 1st class tickets.

“ At the time when the existing 1st class fares were settled with the Corporation the extension of our lines from Girgaum to Byculla, *via* Charni, Foras, and Clare Roads, had not been opened to traffic. These fares are from any station on our lines north or south of Pydhowni to any station up to Pydhowni 1½ anna and from any of the above to any station beyond Pydhowni 2 annas; Pydhowni, therefore, being taken as the demarcating point between the lower and the higher fare. We have applied the same principle to the 1st class fares now charged on the above mentioned extension, the old tramway terminus at Girgaum (opposite the Portuguese Church) being taken as the demarcating point. I desire the formal sanction of the Corporation to this arrangement.

“ Unless the Corporation is willing to sanction these provisions for the working of the 1st class services, I cannot recommend my Board to continue the running of cars with 1st class compartments beyond the time required for converting these composite cars into cars with a uniform class.

“ I have therefore the honour to apply for the sanction of the Corporation to the following proposals in connection with the working of our 1st class services :—

- (1) The experimental continuance of the running of a proportion of composite cars on some of the Company's lines up to the 31st December next with the same tariff of ————

in force, the first class fares now charged on the extension route to Byculla *via* Girgaum to be confirmed, namely, the 1st class fare from any station north or south of the old tramway terminus at the Portuguese Church, Girgaum, to that terminus be 1½ anna, and from any station north or south to any station beyond the said demarcating point, 2 annas.

- (2) The issue of transfer tickets on the 1st class compartments to be discontinued, and only direct tickets to any station to which the car of issue is proceeding to be in future issued in these compartments.

“ At the meeting of the Tramways Committee of the Corporation which I attended on the 3rd May last year a desire was expressed by some of the members of the Committee that the uniform fare of one anna for the ordinary class accommodation on the cars should be extended up to the new terminus at Vincent Road, and that a uniform fare of 2 annas should be charged for the 1st class accommodation. I have discussed this question with my Board and they are unable to assent to any further reduction of the Company's fares. The fact that the Company has been compelled by the terms of its Concession to maintain in force a uniform fare of 1 anna over all the lines taken over from the former Tramway Company, notwithstanding the exceedingly heavy expenditure by the new Company on the electrification of the service and improvement of the cars, and notwithstanding the fact that the statutory authority under which this Company works, namely, the Bombay Tramways Act, authorises fares at the rate of one anna per mile, imposes a severe hardship on us. We are compelled to carry passengers from Sassoon Dock, Colaba, to the Lal Baugh, Parel, a distance of close on 6 miles (5.889 miles) for one anna—a fare unheard of for such a distance upon any other tramway in the world. Our average fare per passenger for the last three months of last year worked out, inclusive of the 1st class fares, at .93 anna per head. At Calcutta, where the conditions are similar to Bombay, but where the fares in force are considerably higher, the average fare works out at 1.46 annas per passenger, namely, half as much again. It was provided in the Concession that the 1 anna uniform fare should only be enforced in the case of the lines taken over from the former Company, and should it now be sought to enforce it in the case of extensions of these lines a very grave injustice will be done to this Company and to its shareholders. Our capital is to a large and increasing extent held in Bombay, there being already no less than 4,000 shareholders on the Bombay Register. The Company is itself the direct creation of the Municipality's own action, and, from every point of view, therefore it is, I submit, entitled to receive equitable and not oppressive treatment by the Corporation.

“ With regard to the wish expressed for a uniform fare of 2 annas for the 1st class service this is in accordance with representations made to us by several passengers that the fares in force do not sufficiently differentiate between the two classes. If, therefore,

it is the feeling of the Corporation that the 1st class fare should be raised to 2 annas and be made uniform I do not desire to offer any objection to this being done, as an experimental measure, although I do not share the opinion that this alteration will increase public patronage of the 1st class compartments."

On the recommendation of the Tramways Committee, the Corporation by its Resolution No. 3022 of 3rd August 1908 accorded its provisional approval extending the tariff of fares up to 31st December 1908, subject to the understanding that the issue of transfer tickets to 1st class passengers should not be discontinued and that the transfer tickets for this class of passengers be issued as heretofore, although such issue should not be held to bind the Company to provide 1st class accommodation in the cars available at the transfer junction.

The Board of the Company decided (and this was notified to the Commissioner on 24th October 1908) to abolish the $\frac{1}{2}$ anna children's Transfer Fare and the $\frac{1}{2}$ anna fare between Crawford Market and Bori Bunder as from 1st November 1908. The $\frac{1}{2}$ anna Direct fare for children was continued.

1909-1910.

The following letter was addressed by the Managing Director to the Municipal Commissioner on 16th November 1909 :—

"I have the honour to address you with a view to obtaining the sanction of the Corporation to an alteration in some of the fares now in force on this Company's lines.

"The present fares are :—

$1\frac{1}{2}$ anna fares—charged to adults between certain points on extensions made by the present Company and certain points on the lines taken over from the old Company.

1 anna fares—charged to adults from any one point to any other point on the lines taken over by the new from the old Company, and charged to children under 10 years of age as half of the $1\frac{1}{2}$ anna fares.

$\frac{1}{2}$ anna fares—charged to children as half of the 1 anna fare, but *only available for direct tickets without change.*

"The average earnings per passenger carried under the above tariff of fares worked out at 1 anna last year.

"This average receipt per passenger compares with 1.46 annas the average receipt per passenger earned at Calcutta where the fares in force are much higher than those in force here ; and 1.32 annas the average receipt per passenger of five tramways in

Europe and Australasia whose route mileage admits of a fair comparison with that of the tramway here, and to whose returns I have access. In America the 5 cent—2½ annas uniform fare is almost universal on urban tramways, and the earnings per passenger approximate very closely to that figure.

“ It is clear from the above figures that compared with the receipts per passenger, and consequently with the fares authorised, on other tramways working in India, in Europe, in America, and in Australasia, the present scale of fares on the Bombay Tramways is abnormally low.

“ There is nothing in the conditions which govern the working expenses of a tramway here to justify these existing unreasonably low fares. The wages paid to native employees (Conductors, Motormen, Mechanics, etc.) are considerably higher than at Calcutta, and although these continue lower than the wages of similar employees in Europe or America, the Salaries of the European executive staff are necessarily more expensive, while the cost of coal, which is the dominant factor in the cost of producing electricity, is very much higher than at Calcutta, England or America.

“ It cannot, therefore, be contested that unless this Company is to be restricted from conducting its business on ordinary commercial principles it should in fairness be relieved from the existing obligation of carrying passengers all over the city for an average fare of one anna. Such a return is not commensurate with the high character of the service provided or with the cost of its operation.

“ There are two alternatives before the Company. The first is to abolish the existing half fares now conceded to children under 10 years of age, and the second is to obtain the sanction of the Corporation to an increase in some of the long distance fares.

“ The Company would very gladly avoid being forced into adopting the former alternative. The Tramway has for many years carried children at half price, and the withdrawal of this concession would unquestionably press somewhat harshly on many of its less well-to-do customers, and could not fail to be unpopular.

“ I have therefore the honour to request that you will obtain the Corporation's sanction to the following revised scale of fares :—

“ The maximum fare on the existing tramway system, i.e. from Sassoon Dock on the south to Vincent Road Terminus on the north, a distance of 6½ miles to be 1½ anna.

“ Except for certain long distance trips hereinafter specified the fare from any one point to any other point on the Company's lines to continue 1 anna.

“ For the purpose of demarcating between the 1½ anna and 1 anna fares the city will be divided into 3 districts :

" *District No. 1* will comprise the area between a line drawn through the furthest northern terminus of our lines, *vis.* Vincent Road Terminus and a line drawn across the city intersecting Tardeo and Mazagon termini, our Bellasis Road Siding, and the junction of Duncan and Bellasis Roads.

" *District No. 2* will extend from this southern boundary of District No. 1 to a line drawn across the city intersecting our Wari Bunder terminus, Pydhowni, and the junction of Girgaum and Charni Roads.

" *District No. 3* will extend from this southern boundary of District No. 2 to our Sassoon Dock terminus.

" We desire that the fare from any point in any one of these three districts to any point in its adjacent district on either side shall remain at 1 anna, and that the fare from any point in any one of these districts to any point beyond the boundaries of its adjacent district on either side shall be $1\frac{1}{2}$ anna.

" This is a very simple and convenient method of demarcating the distances covered by the respective fares.

" Under this regulation the fare from the northern boundary of District No. 1 to the southern boundary of District No. 2, a distance of over 4 miles, would be 1 anna; from the northern boundary of District No. 2 to the southern boundary of District No. 3, a distance of 4 miles, also 1 anna. By indirect routes, within these areas, these mileages covered by the 1 anna fare would be greater.

" I estimate that the probable result of this alteration in the fare tariff would be to increase the average receipt per passenger carried, and therefore the average fare, from 1 anna to a return of between 1.05 to 1.10 annas as against 1.46 annas the average receipt per passenger at Calcutta.

" Under Clause 15 (A) of its Concession from the Municipal Corporation the Company undertakes that there shall be a uniform fare of 1 anna from any one point to any other point of the then existing lines (subject as hereinafter provided). The proviso here referred to was that the Company should be at liberty to institute a 1st class service and to charge special fares with the sanction of the Corporation.

" The Company is of course bound by this undertaking if the Corporation insists on enforcing it.

" I have the honour to submit that there are many reasons of equity and right, in addition to those I have already given, why, if it be willing to take a fair and broad view of the situation the Corporation should not so insist. I will proceed to enumerate some of these.

" The original Agreement on the terms of which this Company's Concession was based, and which included this provision as to the

entered into in March 1901 between the Corporation and W. G. Bingham. To the best of my information Mr. Bingham, who assented to the said provision, had never been associated with the management of tramways, and he acquired the Concession not with the intention that he or his Company should work it but with the intention of selling it.

“ Although the Agreement entered into with this Company on the 7th August 1905 reproduced the above provision it also contained the proviso, as already stated, that the Company should be at liberty to institute a 1st class service at higher fares.

“ It was doubtless in the minds of both parties to the Agreement that the higher fares to be charged on the higher class service would compensate for the lowness of the uniform 1 anna fare to be retained for the lower class service over the lines acquired from the old Company.

“ Experience has, however, negatived this anticipation, and the result of two years' workings, since the commencement of electric traction, have shown that at Bombay the provision of 1st class compartments on the Tramway did not respond to any public need, and that this accommodation on the cars, on which it was provided, was usually left empty. The Company has, therefore, abandoned the running of 1st class compartments.

“ Not only has the Company had to abandon, owing to want of public support, the means which it was anticipated would raise the average fare, but during the 8 years which have elapsed since the Agreement entered into between the Corporation and Mr Bingham there has been a substantial rise of wages throughout the city and the Company has recently felt obliged to considerably augment the scale of pay of both its Conductors and Motormen.

“ The recently sanctioned increase of long distance fares for Hack Victorias is evidence of the rise of prices which in the last few years has taken place in Bombay.

“ Under the Bombay Tramways Act (Act I of 1874) and also under its Agreement with the Corporation the old Company had the statutory right to charge up to 3 annas for any distance not exceeding 3 miles and for any greater distance in proportion. It is true that not long before the Corporation served it with notice of its intention to purchase the undertaking that Company had introduced a uniform 1 anna fare. It did so, however, as an experimental measure, and under special circumstances and conditions. As these no longer exist that experiment, had the old Company retained its ownership, would certainly not have been persisted in.

“ The new Company has introduced greatly improved accommodation for passengers to that provided in the old horse cars, an accelerated and more frequent service, and longer hour running.

" Notwithstanding that, largely in consequence of these improvements, the new Company has a Share Capital of £ 1,200,000 against the old Company's Share Capital of £ 200,000, and a Debenture Capital of £ 750,000 against the old Company's Debenture Capital of £ 13,000, upon which to earn dividends and pay interest, the new Company is at present compelled by the Corporation to charge the 1 anna fare for a distance over which under the Tramways Act, the old Company would have the option of charging 6 annas.

" The primary object of the Corporation in arranging for the buying out of the old Company was, as stated at the time, its desire to obtain more favourable terms for the ultimate Municipal acquisition of the undertaking than those existing in its then Agreement with that Company. It was not, I have the honour to submit, the Corporation's desire to impose upon the new Company conditions as to the working of its business of so oppressive a character as to most prejudicially differentiate the terms on which it could conduct its traffic from those imposed upon any similar undertakings elsewhere. I can safely assert that in the Concession of no other tramway in the world is a condition imposed that it shall carry passengers a distance of $5\frac{1}{2}$ miles for a uniform fare of 1 anna or its monetary equivalent.

" It is not to the real advantage of the city or of the Corporation, as representative of the interests of the public, that the Company should be forced to carry its long distance passengers at a loss. Such a state of things must re-act on the efficiency of the Company's service, on its capacity to make extensions of its lines, and on its power to increase its rolling stock.

" Complaints have of late reached the Company that the stringency of its recent regulations governing the use of transfer tickets has caused public inconvenience. If there be any valid grounds for these complaints, the Company much regrets their occasion. It is not only their desire, but it is also its obvious interest to consult in every way the convenience of the public who use its cars., consistently with the protection of its transfer system from abuse, and, therefore, the protection of its revenue from leakage. *It is, however, incompatible with the present uniform 1 anna fare that passengers proceeding from one extremity of the city to the other should be allowed to change cars wherever and as often as they like.*

" Although this Company could, I submit, justly claim on the above numerous grounds the unconditional assent of the Corporation to the small enhancement asked for in the case of its long distance fares, I do not propose to ask the Corporation to meet it in this matter without offering certain concessions on our side which the granting of our application would render possible.

" Subject to the Corporation sanctioning the rates of fare which I have detailed above the Company is prepared to engage —

- (1) Not to abolish or enhance the present half fares charged to children under 10 years of age ;
- (2) To relax the present transfer regulations so that transfer passengers may select the route by which they travel provided it does not involve more than three changes of cars.

" In conclusion I can only reiterate the hope expressed by the Chairman of this Company, Sir Edward Sassoon, in his address at the last General Meeting of its Shareholders, viz. " We feel no doubt that the *Municipal Corporation will entertain the proposal we intend to submit to them in this matter (of an increase of some of our fares) in the spirit of justice and fair dealing, which they have already shown their desire to be guided in their treatment of a Company which to so large an extent is their own creation and the success and consequent efficiency of which is so important to the interests of the city over which they preside.*"

The Tramways Committee recommended the proposal as follows on 17th January 1910:—

" The Committee have very carefully considered the letter of the Managing Director and recognising the difficulties the Company has to contend with at the commencement of its career they have come to the conclusion that although it is open to the Corporation to insist on the provisions of the Deed of Concession being complied with, the present is an occasion when the Company's proposals deserve sympathetic consideration at the hands of the Corporation and the public at large. To enforce the bond without reservation would not only severely hamper the progress of a very useful undertaking but also eventually mar the very interests of the public which it was the object of the Deed of Concession to safeguard. At the same time the Committee are not disposed to recommend the acceptance of the Company's proposals in their entirety. The most important privilege obtained for the public in making over the Tramways undertaking to the present Company was the aforesaid undertaking in respect of a uniform fare of 1 anna and the Committee are not prepared to recommend that this concession be surrendered for all times. There is no reason to believe that the initial difficulties at present besetting the Company will not disappear in course of time and all that appears to be at present necessary is the co-operation of the Corporation and the public to enable the Company to tide over their present difficulties. The Committee therefore recommend with the concurrence of the Commissioner that the proposals of the Company in respect of the tariff of fares be accepted provisionally for two years subject to the Company undertaking to relax the present transfer regulations as proposed by them and as set forth in paragraph 3 of this report and subject to the undertaking that only half the fare should be charged for children under 10 years of age for all distances irrespective of transfers for which at present no half fare tickets are issued."

The Report was adopted by the Corporation under their Resolution No. 7161 of 28th February 1910.

1912.

As the period of two years for which the above arrangement was arrived at was to expire on 31st March 1912, the Managing Director by his letter, dated 6th March 1912, applied to the Municipal Commissioner for an extension of the provisional arrangement for a further period of three years. His letter dated 6th March 1912, was as follows :—

“ I have the honour to recall to your remembrance that on the 28th February 1910 the Corporation passed a Resolution accepting certain alterations in this Company's tariff of fares which were recommended for its approval by the Tramways Committee of the Corporation.

“ These alterations have been the subject of discussion by the said Committee with the undersigned and in consideration of its approving of the demarcation of the City into three districts and of the fare from any point in any one of these districts to any point in the adjacent district on either side being fixed at one anna and from any point in District No. 1 to any point in District No. 3 being fixed at $1\frac{1}{4}$ anna, this Company undertook :—

- (1) To maintain the half fares charged to children under 10 years of age.
- (2) To relax its then transfer regulations so that transfer ticket passengers might select the route by which they travelled to any point provided this did not involve more than three changes of cars.

“ The period of two years for which the above arrangement was to continue in force will expire on the 31st instant, and I have therefore the honour to address you on the subject of its prolongation.

“ Although the slight augmentation of a few of the long distance fares which was embodied in this arrangement has not resulted in the increase in the Company's traffic revenue which was hoped for from that source, the settlement as a whole has worked so smoothly, and the tariff of existing fares and regulations are so well known to and have been so well received by that large section of the public who use our cars, that I should much regret any disturbance of the present arrangements and the reopening of the various questions of the rates of children's fares etc., of which they were a settlement.

“ One great advantage of the present tariff is its simplicity, and this will be especially apparent when fresh extensions of the tramway are undertaken as the demarcation of the City into zones or districts automatically fixes the fares. These fares, as is universally recognised, are extremely low. I am

confident that those members of the Corporation who are acquainted with the tramway services of Europe and America will corroborate me when I claim that having regard to the accommodation provided, and the general character of our service here, it is probably still the cheapest in the world.

"Such a service as we provide must be expensive to the shareholders, and this fact coupled with the present Company's heavy capitalization resulting from the conditions under which, *on behalf of the Municipality, it financed the purchase and electrification of the business of the old Company, has so far prevented the holders of its Ordinary Shares from receiving any dividend on their investment.*

"I have therefore the honour to express a very strong hope that the Corporation will not think it desirable to upset the present fare arrangements. So far as I am aware we have not received a single complaint that they are in any way inequitable or oppressive.

"What I would beg permission to suggest for the favour of your recommendation for the Corporation's approval is that the present fare tariff be confirmed for a further period of three years from the 1st proximo at the end of which period its further prolongation can again be made dependent upon the Corporation's sanction."

The matter was referred by the Corporation to the Tramways Committee for report, approving in the meanwhile the existing arrangements for the levy of tramway fares being continued pending the final decision of the Corporation. (Corporation Resolution No. 217 of 11th April 1912).

The following recommendation of the Committee (26-4-1912) was approved and adopted by the Corporation Resolution No. 1967 of 27th June 1912 :—

"At the request of the Committee the Managing Engineer has been good enough to furnish figures showing the effect of the provisional scale of fares as compared with the old scale on the Company's receipts. As, however, the Committee find that they would be in a better position to gauge the financial position of the Company after its annual report is published in June next and as the Company has now in hand some schemes for the extension of the Tramway service and as it would be desirable to consider what effect the Corporation's decision in regard to the fares on the existing lines would have on the proposed extensions, the Committee beg to recommend that sanction be given to the continuance of the existing arrangements for the levy of fares up to 30th September 1912 and that the Managing Director of the Tramway Company be requested to bring up in the meanwhile proposals for the extension of their lines so as to admit of the

tariff of fares for the extensions being considered along with the question now before the Corporation."

In accordance with the above Resolution, the Municipal Commissioner requested the Company to forward the proposals which it intended to suggest for the extension of its tramway lines.

A letter dated the 31st May 1912, which was addressed by the Managing Director from London to the Municipal Commissioner, was withheld by the Bombay Office pending the informal negotiations which were going on between the Municipality and the Company and the subsequent correspondence with the London Board. On 5th September 1912, the Board instructed the Managing Engineer to send this letter immediately without altering its date. This letter was forwarded by Mr. Cooper with a covering letter on 6th September 1912 explaining why its submission was delayed and intimating the willingness of the Board to make, in addition to the extensions outlined in Mr. Rimington's letter, an extension from Byculla Bridge along DeLisle Road as far as Elphinstone Road so soon as the proposed overbridge over the level-crossing of the B. B. & C. I. Railway was completed, provided a satisfactory settlement of the Fares question was arrived at.

Mr. Rimington's letter dated London, 31st May 1912, was as follows :—

" Referring to my letter No. 1442 dated 6th March last, applying for the extension for a further period of three years from *the 1st April 1912 of the arrangement arrived at with the Corporation in 1910 dividing this Company's tramway lines into three zones and making the fare between any two adjacent zones one anna, and between zones 1 and 3 one and a half anna*, the Directors of this Company have now been advised from Bombay that the Tramways Committee of the Corporation have recommended the Corporation to extend the said arrangement for a period of six months only and that the Committee desire that we should meanwhile inform them what extensions of our present track we have in view and what bearing these will have on the question of our fares.

" We have further received from Bombay copy of a Memorial addressed to the Municipal Corporation to which the signatures of certain inhabitants of Bombay have, we understand, been obtained, and the purpose of which is to dissuade the Corporation from entering into any prolongation of the arrangement above

9. The only objection having any validity which can be raised to the present zone demarcation is, that the middle section is considerably narrower in width than the other two, and that consequently residents at Byculla are thereby penalised.

10. With a view to meeting this objection the Company are willing to subdivide the existing northern and southern zones into two areas, leaving the centre zone unchanged. We are willing to subdivide the southern zone by a line drawn along Church Gate Street and therefore passing through the Flora Fountain and Elphinstone Circle. We are similarly willing to subdivide the northern zone by a line passing through Jacob's Circle, the junction of Clerk and DeLisle Roads, the Victoria Gardens Gateway, and the junction of Tank Bunder and Reay Roads.

11. This sub-division to our existing tramway system into five zones instead of three zones will have an important effect on fares as our proposal is that the fare within any three zones shall be one anna—in other words that instead of that fare applying only to any two adjacent zones as at present, it shall allow of crossing any one intermediate zone. This offer, it is needless to point out, proffers an exceedingly wide concession on the Company's part for the purpose of meeting any alleged discontent with the present zone demarcation. For example, a passenger entering a car at the Victoria Gardens can at present travel as far as Pydhowni only for one anna. Under the proposed division he will be able to travel all the way to Church Gate Street for that fare. Similarly, a passenger now entering a car at Jacob's Circle, who can at present travel to Pydhowni only for one anna will be able to travel as far south as Church Gate Street for that fare.

12. Subject to the maintenance of the Zone System as thus modified, my Company is willing, so soon as the extension of the Frere Road into Reay Road is completed, to extend its present Frere Road line along the Reay Road as far as the Victoria Road with a view to its thence entering the Reclamation over the proposed overbridge. The construction of this line is of course conditional upon the Port Trust allowing this extension to enter the Reclamation from the Reay Road, as we understand that they are willing and anxious it should do.

13. So soon as this line is laid the Company is further willing to lay a connecting line between it and the Parel Road line *via* the Victoria Road.

14. The effect of those two extensions will be to place the Reclamation in tramway communication with both the Port and the northern districts of the city. Ultimately an extension between the Bhendi Bazaar and Frere Road *via* the new Sandhurst Road will similarly provide communication with the central districts of the city.

15. Under the Zone System as it is now proposed to modify it, passengers will be able to travel from the proposed terminus of our lines in the Reclamation to Church Gate Street for one anna.

16. I think that what I have written above evidences the desire of the Directors of this Company to treat this important question of fares in a broad and conciliatory spirit and past experience justifies their expectation that the Corporation will also deal with it in the same spirit. The Bombay tramway service can safely challenge comparison with the most up-to-date service provided elsewhere, while the fares charged upon it are comparatively exceedingly low. Under the fare tariff now in force our average receipts per passenger for the year 1911 were 1.01 anna. On 39 Tramways working in this country and its Colonies, (to the Annual Reports of which I have had access) I find that the average receipts per passenger were 1.25 anna, while at Calcutta they were 1.46 anna per passenger.

17. The Directors are not prepared to see our average receipts per passenger fall below one anna, and if the Corporation should decide that the fares are to revert to what they stood at before the present arrangement was entered into, then, the Company will be compelled to withdraw the half fares now allowed to children and to make this abolition apply to both direct and transfer tickets.

18. Reference having been made by the Tramways Committee of the Corporation to the relative financial position of this Company now and in 1910, it seems desirable to remind the Committee what that present financial position really is. After six years of working without being able to pay any dividend on its Ordinary Shares the Company earned last year just sufficient balance of profit to enable the Directors to recommend payment of a 3 per cent dividend on those shares. Or, if the entire subscribed Capital of the Company both Share and Debenture be regarded, then the average payment of dividend and interest in respect thereof will (assuming a dividend of 3 per cent on the Ordinary Shares be sanctioned by the Shareholders) work out at 4.5 per cent. This can hardly be regarded as an adequate return upon an industrial enterprise. And even this result was only achieved on the fare tariff to which exception is now being taken—a material consideration which we are confident the Corporation will not overlook. Moreover, the Company if it is to carry out its full potential mission of usefulness to the public of Bombay has a large capital outlay still ahead of it. Apart, therefore, from any question of fairness to the Company, it is to the interest of the city that the questions now at issue be regarded from a broad and equitable standpoint.

“ P.S.—Referring to para 11 above, it is of course intended that the maximum fare between our present termini shall remain one and a half anna.”

On 17th October 1912, by Resolution No. 4181, the Corporation referred the matter to the Tramways Committee for report.

As the Company apprehended that the settlement of the question was likely to be unduly delayed, the Managing Engineer by his letter of 24th October 1912 advised the Municipal Commissioner :—

“ That my Board have instructed me to intimate to you that they propose for the present to keep in force the Fare Concessions now granted to children, but that should no satisfactory decision with regard to the proposals now before you be arrived at by January 1st next they will be reluctantly compelled to withdraw those Concessions on that date.”

Since no settlement was arrived at, the Managing Director, “ as a matter of courtesy,” informed the Municipal Commissioner on 30th December 1912 that the half fares heretofore conceded to children travelling on the tramway would be withdrawn from the 1st January 1913. Similar notice was given by the Traffic Manager to the public.

1913-1914.

In a letter addressed to Sir Pherozeshah M. Mehta by Mr. Rimington on 16th January 1913, the latter *inter alia* wrote as follows :—

“ Looked at from a broad standpoint there is, I think, much in favour of the acceptance of our proposals in the public interest and the consequent definite settlement of fare questions between the Corporation and ourselves. The resulting advantages would be :—

- (1) The restoration of the half fares to children.
- (2) The settlement of fares on a zone basis which on a proportionate mileage ratio would apply to all future extensions of the tramway.
- (3) The resulting equality as to the fares paid between every passenger by the Tramway. As matters stand passengers using new lines may have to pay a higher mileage fare than passengers using the old lines.
- (4) The encouragement to the Company to build extensions of its tracks. If things remain as at present the fares to be charged on each extension will have to be settled between the Company and the Corporation before an extension can be made, and in the event of disagreement arbitration will be necessary.

Mr. Rimington's reply to this Resolution was contained in the following letter addressed by him to the Municipal Commissioner on 26th January 1914 :—

“ In reply to your letter No. 31886 of 22nd instant accompanied by copy of the Municipal Corporation's Resolution No. 6277 of the 19th instant to the effect that unless this Company restored half fares to children permission to have standing accommodation on certain cars is cancelled unless passengers without seats are carried for a uniform half anna fare, and with reference to your enquiry as to which of these alternatives we propose to adopt I have the honour to say that I conceive that your letter must have been written, and the above Resolution passed under some misapprehensions of the facts attendant upon (a) the provision of standing accommodation on some of our cars, and upon (b) the withdrawal of the half fares which prior to 1913 were conceded to children. Perhaps you will permit me to re-call these facts to your recollection.

“ Dealing first with (a), I have the honour to remind you that in April 1912 it was arranged between your predecessor in office and the Managing Engineer of this Company that with a view to the greater convenience of passengers, especially at the “ rush ” hours of office traffic, special compartments for passengers who wished to stand in preference to waiting for a vacant seat should be tentatively provided on a few of our bogie cars for some months in order to test whether such provision responded to a public need. Ten cars so altered were accordingly run experimentally for 10 months and consequent upon the results of that trial, which proved that this convenience was much appreciated and largely availed of, this Company by my letter to the Municipal Commissioner No. 889 dated 1st February 1913 applied for the sanction of the Corporation to the provision of similar standing compartments on all of its 100 bogie cars. This application was referred by the Corporation to its Tramways Committee for consideration, and that Committee, after careful enquiry, inspection of an altered car, and settlement with the Company of some variations in the original

design, recommended in its Report dated 7th May last that that sanction be accorded for a period of "three years with effect from the 1st January 1914," and "that it would be open to the Corporation to re-open the question, if they thought it desirable *after the term of three year.*" This Report was duly adopted by the Municipal Corporation at its Meeting of the 26th June at which the following Resolution was recorded :—

" That the 37th Report dated 7th May 1913 of the Tramways Committee, reconstituted by Corporation Resolution No. 140 dated 7th April 1913, regarding the proposals for allowing standing compartments in tram cars and the question of providing reserved accommodation for ladies in the cars be approved and adopted and a copy be forwarded to the Commissioner for information and guidance." This Resolution was officially communicated by the Municipal Commissioner to my Company in his letter No. 8567 of 17th July last. Pursuant to the sanction thus given the alteration of 50 cars so as to provide a compartment on each car to allow of 20 passengers standing has up to date been completed.

" Coming now to (b), namely the withdrawal on the 1st January 1913 of the half fares previously allowed to children under 10 years of age, I must also ask your permission to recall to your recollection how and why that withdrawal came about

" Under the Concession granted to the Company by the Municipality in 1905 the division of cars into two classes was sanctioned and the fares subsequently approved by the Corporation for the 1st class were 1½ and 2 annas according to the mileage travelled. Experience quickly showed that the higher class was but very scantily availed of, and, as a large amount of accommodation was consequently wasted, it was decided that the requirements of the service would be better met by its abolition. The fact that the expectation of raising the average receipts per passenger by means of the 1st class fares had been disappointed, coupled with the substantial increase in wages to its employees necessitated by the increased cost of living at Bombay, obliged the Company to approach the Corporation in 1909 and lay before it the necessity of its withdrawing the half fares conceded to children unless the Municipality was prepared to alternatively approve of some enhancement (up to a maximum of 1½ anna) of a few of the long distance fares. The Corporation agreed to this enhancement for a period of two years, upon the understanding that the half fares to children were concurrently maintained. This provisional arrangement, which was subsequently extended, expired on the 30th September 1912. Before its expiration, and with a view to the retention of the half fares to children, the Company submitted proposals to the Corporation for a permanent settlement of the fares question by the adoption of a zone system, on a mileage basis, which would have automatically fixed the fares upon existing lines and upon future extensions. Under that settlement, had it been adopted, the average fare paid per passenger for travelling over the Company's present lines

(including permission to change cars three times, when necessary, in the accomplishment of any particular journey) would have worked out at 1 anna. The Corporation postponed a decision regarding those proposals, and as it simultaneously decided to withdraw the provisional enhancement of the long-distance fares, the situation reverted to the *status quo ante*, namely the situation as it was in 1909 when the Company gave notice that in default of any amendment of the fare tariff for long distance travel, it would be obliged to withdraw the half fares conceded to children. Since those half fares have been withdrawn the Tramway has (for the year 1913) carried 40,034,000 passengers for a fare of 1 anna, and 342,400 passengers for a fare of $1\frac{1}{2}$ anna, and the average fare per passenger carried therefore works out at 1.004 anna. This compares with an average fare of 1.45 annas paid by passengers on the Calcutta Tramway.

"I think that the above facts speak for themselves, and it does not seem to me that further comment on them is called for from me except to repeat my submission that when passing the Resolution, of which you furnish me a copy, the Corporation must somehow have lost sight of the terms of its Resolution of 26th June last quoted above. It only remains for me with reference to your enquiries as to whether we propose to restore the half fares to children or alternatively to charge a half anna uniform fare to passengers availing themselves of the Standing compartments, to state that unless and until it be shown that my Company is under any legal obligation under the terms of its Act from Government or of its concession from the Municipality to do either, the answer to both enquiries must, under the circumstances above explained, be in the negative. The Company is, however, with a view to consulting the wishes of the Corporation, quite willing to restore the half fares to children should the Corporation be pleased to approve the tariff of fares on the zone mileage basis submitted for its sanction in my letter to the Municipal Commissioner dated 31st May 1912. So far as I am aware, the Corporation has not at present recorded any decision upon those proposals."

The matter regarding standing accommodation in tram cars was referred to the Tramways Committee by the Corporation Resolution No. 8765 passed on 19th March 1914.

On 5th June 1914, Mr. Rimington addressed the following letter to the Municipal Secretary from London :—

"The Directors of this Company have been advised from Bombay of the discussion which took place at the Meeting of the Tramways Committee of the Corporation held on the 23rd April last with reference to the Company's withdrawal on the 1st January 1913 of the half fares theretofore conceded to children under the age of 10 years.

"According to the report received from the officer of the Company who attended that Meeting the Committee expressed the hope that the Board of this Company would reconsider the

action then taken and restore the half fares in question having regard to the views taken by the Committee : (a) that the withdrawal of these fares was of doubtful legality ; and (2) that it was carried out with insufficient notice to the Corporation.

“ With regard to (a), I am instructed to say that before taking the action referred to we were advised by our legal advisers that by its adoption we should only be exercising our undoubted rights under our Concession from the Municipality, and under our Act from Government. We understand that the Corporation have themselves since sought Counsels opinion on that point, and should that opinion be at variance with the opinion we obtained, we will, if that will meet the Corporation's views, gladly take part with them in a friendly reference to the High Court under Rule 36 of the Civil Procedure Code for the purpose of obtaining an authoritative decision on the point of law.

“ With regard to (b), namely, the view that the withdrawal of the half fares was carried out with insufficient notice and therefore with some want of due consideration towards the Corporation, I have the honour to submit that that view is not supported by a correct recollection of the facts of the case. The necessity of the withdrawal of the half fares to children (in order to maintain the average fare per passenger at 1 anna over the whole of the Company's system) failing some readjustment being sanctioned by the Corporation of the general tariff in respect of long distance fares was submitted to the Municipality as long ago as 1909. The provisional agreement then entered into expired on the 30th September 1912. The Company's proposals for settling the whole fare question by the adoption of a zone system estimated to produce an average 1 anna fare per passenger carried over the whole of the Company's present lines, to automatically settle on a proportionate mileage basis the fares on future tramway extensions, and to retain in force the half fares to children, were placed before the Municipality on the 6th September 1912, and although, in our opinion, the Company would have been fully justified in withdrawing these half fares on the 1st October following (namely, upon expiration of the above mentioned provisional agreement) pursuant to the notice given to the Corporation in 1909, that withdrawal was not in fact made operative until the 1st January 1913, after a fresh notice had been given to the Municipal Commissioner on the 24th October 1912.

“ I trust that a reconsideration of the above facts will evidence to the Committee that the Company's attitude throughout these negotiations has been both consistent and reasonable, and has always been governed by a sincere desire to consult the views of the Corporation. What the Directors have regarded as essential, and must continue to regard as essential, is that the average fare per passenger carried over its present system shall not fall below 1 anna. When it is remembered (1) that the Concession from the Municipality granted in 1905 distinctly contemplated that by the higher fares sanctioned for the proposed first class compartments, and left by it to be settled for the extensions,

of the lines since made, the average receipts per passenger would be raised considerably above that figure ; and (2) that since then the Company has found it necessary to increase the wages of its traffic employees by some 30 per cent., there is surely no valid ground for pressing upon us a further reduction in a fare tariff which is already 45 per cent. below that in force in Calcutta and even more markedly below those in force in Europe, although the service provided for the public is equal to either.

" As pointed out by the undersigned in his letter to the Municipal Commissioner dated 26th January last the proportion of 1½ anna tickets issued on its system to 1 anna tickets is less than one per cent., and, even with the half fares to children withdrawn, the average fare per passenger worked out for the past year at only 1.004 anna.

" The Committee now invite the Company to restore the half fares to children without any definite promise of a reciprocal revision of its long distance fare tariff, and thereby to make a sacrifice of annual revenue which we estimate at fully Rs. 40,000. Although, as always, most desirous of consulting the wishes of the Corporation, the Directors regret that this is a suggestion which their duty to the Company's shareholders precludes them from acceding to.

" It is, however, a quite incorrect presentation of the situation to suggest, as some of the Committee would appear to have done, that the Board of the Company have by " an ultimatum " or in any other way closed, or desired to close, the door to any just and reasonable settlement of the fare question. Subject to a tariff being adopted which would secure to the Company a minimum average fare of 1 anna per passenger carried on its existing system (which, as already pointed out, is below the average fare contemplated by the parties to the Concession) and a proportionate increase of fares, on a mileage basis, on any future extension of its lines, the Board are most desirous of reaching an arrangement with the Corporation which would enable us to restore the half fares to children which we so reluctantly withdrew.

" As the Company has recently applied for sanction to one extension of its lines and it is probable that sanction to further extensions will be applied for in the near future, the fares to be charged on which are by the terms of the Concession to be the subject of agreement between the Corporation and the Company, a suitable opportunity will shortly arise for a comprehensive readjustment of our fare tariff, with the result, as my Directors earnestly hope, of our arriving at a settlement which will recommend itself to the Corporation and which will enable the Company to reintroduce the children's half fares.

" Perhaps you will be kind enough to forward this letter to the Chairman of the Tramways Committee of the Corporation."

As the discussion in the Tramways Committee was still going on and as these wanted the Company to restore the half fares to children, Mr. Rimington wrote the following letter on 19th January 1915 to the Municipal Commissioner consenting to restore the half fares to children during the duration of the war, and, in any event until the end of the year 1915:—

“ With reference to the discussion at the last meeting of the Tramways Committee of the Corporation on this subject, and the request then made to me by the Chairman that I would resubmit to the Board of this Company the question of our restoring the half fares to children which were withdrawn on the 1st January 1913, I have now the honour to advise you for the information of that Committee that I duly complied with that request.

“ The grounds upon which the Committee urged upon us the restoration of the said half fares were I understood to be :—

- (1) That their withdrawal was of doubtful legality.
- (2) That the manner of that withdrawal was in some measure open to resentment by the Corporation.

“ Both of these contentions were so fully dealt with in the letter which I had the honour to address you under date the 5th June last, that it seems unnecessary to again repeat that reply.

“ My Directors cannot depart from their view that the withdrawal of the half fares was not only entirely within their discretion in a legal sense, but that it was also fully justified by the circumstances of the case, and that a fair consideration of the facts already laid before you in my said letter will absolve them from any charge of having treated the matter with any precipitancy, and still less with any want of courtesy towards the Corporation.

“ I am now authorised to say that as evidence of their desire to comply, so far as they are able, with the views expressed by the Chairman of the Committee and his colleagues, and having regard to the impoverishment of considerable classes in the City resulting from the war, my Directors have consented to restore the half fares to children during the duration of the war, and, in any event until the end of the present year. I trust that this concession will gratify the Committee, especially as it has been made, in deference to their wishes, at a time when our revenue from the Tramway is suffering from the general depression.

“ In connection with the question of fares I have the honour to remind you that the Corporation has not yet considered and decided on the proposals regarding a zone system which were submitted to you in my letter dated 31st May 1912. The effect of the adoption of those proposals would be (a) to recast the fares on a mileage basis; (b) to automatically fix the fares upon future extensions of the Tramway on the same principle; and (c) to secure the permanent restoration of the half fares to children.

" I have the honour to remind you that under these zone proposals the average fare per passenger carried over the whole of the present tramway system works out at 1 anna, which is considerably below the average fare which it was intended to secure to us by the terms of the Municipal Concession, which provides : (a) that we shall carry passengers from any one point to any other point on the lines taken over by the new from the old Tramway Company for a uniform rate of 1 anna ; (b) but that the Company was allowed to introduce 1st class compartments on its cars the fares in which over the same lines were subsequently fixed at 1½ annas ; (c) that fares on extensions of the old lines made by the new Company were to be settled by it with the Corporation, an arrangement which contemplated their increase above 1 anna on a mileage basis.

" In view of the desirability of now getting our fare tariff settled on a stable basis perhaps the Tramways Committee of the Corporation will kindly consider the proposals submitted in my above mentioned letter of 31st May 1912."

When this letter was placed before the Tramways Committee at their meeting held on 4th February 1915, the Committee expressed their disappointment at the proposal to restore the half fares to children only temporarily during the duration of the war and suggested to the Managing Director the desirability of restoring the fares without any such reservation.

1919.

The above temporary arrangement regarding half fares to children was continued even after the war and the reservation previously imposed by the Company was withdrawn when on 10th July 1919, the Managing Engineer informed the Corporation that within the past few months the Company had been able to see its way to allow children to travel for half fares whether making direct or transfer journeys.

1922.

It will be seen that the proposals referred to the Tramways Committee by Corporation Resolution No. 4181, dated the 17th October 1912, were in abeyance all these years and were still before them.

The following letter dated the 20th May 1922 for the introduction of a uniform fare of one and a half anna over the whole of the Company's system, not only as existing but

also as it was expanded, was addressed by the Managing Engineer to the Municipal Commissioner :—

“ Under instructions from the Board of The Bombay Electric Supply and Tramways Company, Limited, I have the honour to ask you to lay before the Bombay Municipal Corporation an application for a revision of the present scale of fares on the Tramways and the charges for the supply of electrical energy.

“ The present scale of Tramway fares was fixed in 1905. We then had 17 miles of double tramway tracks. We now have 25 miles. The charges for electrical energy were fixed in 1910. Under the Tramway tariff a passenger is carried over the greater part of the system for a uniform fare of one anna. The distance over which this anna fare obtains is from Sassoon Dock to Lal Bagh, or five and a half miles. It is not until a distance greater than five and a half miles is traversed that there is any enhancement of this anna fare, and it is then raised to one and a half anna, which covers the journey from Sassoon Dock to Dadar, 7.6 miles. We believe we are correct in saying that there is no other city in the world where such a low tramway tariff obtains.

“ The general charge for electrical energy is four and a half annas per unit less discounts, with special tariffs for power and certain institutions. Having regard to the distance of Bombay from the coal-fields and the consequent high generating charges, here again we believe that there is no other tariff so low in circumstances which are at all comparable.

“ All over the world transportation charges, arising out of the vastly increased operating expenses, have steadily increased. We need only refer to the several increases in the scale of fares on the Indian Railways, culminating in the latest increase of twenty-five per cent. on passenger fares and the consolidation of the surcharge in the goods tariff. Also to the increase in the charges for gas in Bombay, which have been raised from Rs. 5-4 and Rs. 3-8 for lighting and heating, in the year when our present tariffs were fixed, to Rs. 6-8 and Rs. 5-8 increases of 24 per cent. and 57 per cent. respectively to-day. The Hydro Electric Companies have raised their rates. Our Company is unique in having hitherto faced these oppressive increases in operating charges without asking for any increase in its tariffs.

“ The Company are fully cognisant of the importance of a low Tramway tariff in a city like Bombay and of the lowest possible charges for electrical energy. They have therefore refrained from approaching the Corporation for an enhancement in these tariffs until it was imperative. But they are now faced with a position when it is impossible for them to discharge their obligations to the Corporation and the public without an increase in their revenues. The City is fast expanding northwards and the Corporation and the Port Trust are pressing the Company to extend their tramway system. From the figures which are given below it is apparent that the Company cannot construct these extensions nor even

maintain the existing service in a high state of efficiency, without an increase in their tariffs. The whole of the normal growth and much more is absorbed in increased operating and constructional expenses, from which no relief can be expected.

“(a) *Construction.* In 1907, when the horse tramways were converted to electric traction, the cost of one mile of double track complete with Overhead Equipment was approximately Rs. 1.12 lakhs; the cost at present is almost Rs. 4 lakhs per mile, where in accordance with the requirements of the Corporation, a concrete under bed and sett stone paving is insisted on

“(b) *Rolling Stock.* The cost of building rolling stock has been nearly trebled since 1913.

“(c) *Coal.* In 1913 coal cost the Company Rs. 13-8 per ton delivered in the Power Station bunkers. At the present time Indian coal costs Rs. 34-8 per ton. We burned over 50,000 tons of coal last year.

“(d) *Wages.* In 1913 the wages of Conductors varied from a minimum of Rs. 20 to a maximum of Rs. 30 per month after six years' service; drivers wages varied from Rs. 17 to Rs. 25.

“In 1921 the average monthly pay actually drawn by conductors amounted to Rs. 51, and by drivers Rs. 49. These increases are independent of the following additional concessions :—

“Provident Fund, Gratuity on retirement after a minimum of ten years' service, free clothing issued 3 times per annum, and a yearly bonus of one month's pay if sanctioned by the Shareholders in General Meeting. The total cost of these concessions in 1921 was Rs. 2½ lakhs approximately.

“Salaries and wages generally throughout the Company have increased in a similar extent. Taxation in 1906 amounted to Rs. 8,763, but in 1921 to Rs. 6½ lakhs approximately.

“*Tariff Proposed.* From this brief statements of the facts it will be apparent to the Corporation that the Company cannot extend its system as rapidly as the Corporation and other public bodies desire, nor maintain the existing service at the requisite standard of efficiency, on the present scale of charges. The Company have given anxious consideration to the proposals which they should lay before the Corporation. They have aimed at a tariff which whilst being adequate, and no more, for their purposes, will conform to the desire of the Corporation for a uniform fare, simplicity in working, and facilitate the expansion of the City northwards. They therefore propose that a uniform fare of one and a half anna shall apply over the whole of the Company's system, not only as existing, but as it is expanded in conformity to the Corporation's requirements. Such a tariff, they calculate, would enable the Company to maintain its service in a high state of efficiency and also enable it to proceed with the extensions which are now desired.

"We do not suggest that any alteration should be made in the present Transfer Regulations, or in the principle of half fares to children, which should be fixed at an universal fare of anna one.

"As regards the rates charged for the supply of electrical energy, we propose that the Corporation authorise the Company to add a surcharge of 15 per cent. to the total of all bills rendered for the supply of electrical energy, except in the cases of large consumers with whom contracts are current and of Hospitals, to which the present rate of annas 3.15 will continue to apply.

"The rates charged under contract will be raised when current contracts expire.

"As the Company are pressed to proceed with the Victoria and Messent Roads and Gowalia Tank and Kingsway extensions, we shall be glad if you will treat this matter as urgent."

The following Note, dated 28th August 1922, stating the grounds on which the increase in tram fares and supply rates was asked for, was prepared and circulated by the Secretary of the Company among the members of the Corporation :—

"The demand is necessitated by the abnormally heavy increase in expenses far beyond the normal growth of receipts as can be seen from the following facts :—

"Working results for 1921 as compared with 1913.—

	Per cent.
Increase in gross combined receipts (both traction and supply)	180.4
Increase in combined expenses	289.9
Net increase in expenditure	109.5
Increase in gross traction receipts	120.2
Increase in traction expenses	242.9
Net increase in expenditure	122.7
Increase in gross supply receipts	277.4
Increase in supply expenses	357.3
Net increase in expenditure	79.9

"The ratio of expenses to gross receipts for 1913 and 1921 is :—

	Per cent.
Combined expenses for 1913	47
Do. do. 1921	66
Traction expenses for 1913	48
Do. do. 1921	74
Supply expenses for 1913	44
Do. do. 1913	53

“ These increases are solely due to the abnormal heavy increase beyond the control of the Management in :—

Wages and salaries.

Cost of coal.

Cost of plant, equipments, materials, etc.

Income Tax and Super Tax.

“ The Share Capital of the Company in 1913 was Rs. 1,80,00,000.

“ The Share Capital of the Company in 1921 was Rs. 3,60,00,000.

“ The result was that the dividend of 16 per cent plus 4 per cent bonus in 1919 declined to 12 per cent in 1920 and 10 per cent in 1921.

“ The dividend of 10 per cent in 1921 would have been about 7 per cent if adequate provision had been made for depreciation.

“ It has to be borne in mind that for some years in the beginning no dividend was declared and the average rate of dividend on the Company's Ordinary Shares amounts to only 6½ per cent on their face value.

“ If no steps are taken to increase the revenue and the ratio of expenditure remains the same, if not higher, the dividend is sure to decline progressively year by year, and it will not be possible to secure the required capital to cope with the growth of the business.

“ In 1921 the capital expenditure was Rs. 42,00,000. This year it is estimated at Rs. 45,00,000.

“ An increase in fares and the supply tariff has therefore now become imperative ; without it there cannot be any extensions, additions to the rolling stock, etc., and general improvements and increased facilities of service.

“ A mile of double track at present costs about Rs. 4,00,000 as against Rs. 1,12,000 in pre-war time, exclusive of the electrical distributing mains for traction, the cost of which is about double the pre-war rate.

“ The cost of building a car has nearly trebled since 1913.

“ Even before the war, the one anna fare for a journey of 6 miles was exceedingly low, but now when the purchasing power of a rupee has declined to ¼rd of its pre-war value the fare comes to about 4 pies for 6 miles, i.e., 2/3rds pie per mile, while the Victoria fares are fixed at about 6 annas and taxi fares at 8 annas per mile.

“ Last year I had an opportunity of comparing tramway fares in France, England, United States of America, Japan, China, etc., and in no country were the fares so low as in Bombay.

"When the Deed of Concession was granted by the Municipality no one had the faintest idea that there was going to be a World War upsetting everything and every calculation with disastrous results all round.

"Take any case you like, there is no business in the whole world, not a single public utility, railway or steamship company which has not increased its charges, rates or fares. Not a single Government or Municipality, including our own, which has not raised its taxes and rates, and to expect The Bombay Electric Supply & Tramways Company to carry on on the old basis under altogether changed circumstances is neither fair nor equitable. If the resources of the Company are crippled it is the public who shall have to suffer in the long run for want of adequate provision to cope with the traffic.

"The chief argument brought against the increase is that it will tell on the travelling public. But it is to be remembered that along with the increased cost of living the income of the people has also correspondingly increased so much so that not only are mill-hands, workmen and labourers freely availing themselves of the facilities of travelling in tram cars but even beggars.

"Those who argue against any increase in the one anna fare forget that at the time of changing over from the Horse Tramway Company to the present Company it was restricted to the then existing line, that is from Sassoon Dock to Lalbag. For any extensions since then the Deed of Concession provides that the fares and charges are to be fixed subject to the approval of the Corporation.

"At the time of taking over the concern from the Horse Tramway Company the track was 17 route miles which has now been increased to 25 route miles, an increase of 47 per cent for which the Company could have asked for higher fares, and its not doing so, conclusively proves how reluctantly they have made the present demand.

"In some quarters a great point is made that for extensions of the line the Company has to pay 50 per cent track rent charged for the old line. In this connection it is to be borne in mind that over and above the Rs. 61,000 that the Company paid last year to the Municipality for track rent, it had to maintain and keep under repair 25 miles of 18 feet wide road surface, the cost of which amounted to about Rs. 1,50,000. The obligation to maintain the road when the horse trams were in operation was quite justifiable because the horses running on it used to break it up. But such is not the case since the electrification of the system and still the Company has to maintain the road merely for running the cars on the rails.

"Notwithstanding the very low rate of fares the Company gives to its passengers the unusual facilities of changing at three different places.

"The Company carries children under 10 years of age at half the fares which is not at all obligatory on its part.

"As regards the Supply Tariff the Deed of Concession provides:—

- (i) Maximum rate of eight annas per Board of Trade Unit for all purposes with a minimum charge of Rs. 20 per quarter
- (ii) For private lighting purposes six annas per Board of Trade Unit.
- (iii) For public lighting purposes three annas per Board of Trade Unit.
- (iv) For power purposes three annas per Board of Trade Unit.

The actual tariff in force at present is —

- (1) For commercial and business premises 4½ annas per unit with a discount up to 35 per cent at the rate of 1 per cent for every 250 units.
- (2) Residential, religious and educational premises 4 annas per unit.
- (3) Industrial purposes from 5 to 10 Brake Horse Power 2 annas per unit.
- (4) Over 10 Brake Horse Power maximum 1.5 annas per unit.
- (5) Heating purposes 1 anna per unit.

"Over and above this the Company has since reduced the meter rent per month from Re. 1 to annas eight since July 1920, and also supplying 5 yards of service cable on private property free of cost since January 1916.

"It must be admitted that a surcharge of only 15 per cent asked for is not at all unreasonable.

"In some quarters a point is raised that why should not the Company take its supply from the Hydro Company. Negotiations are being carried on with the Hydro Companies to obtain a supply from them, but it will be some years before they will be in a position to meet the Company's full requirements.

"It is contended in some quarters that instead of asking for an increase in fares and supply rates if strict economy were effected in the working of the business there would be sufficient saving to meet the enhanced operating costs. Every principal item of expenditure is vigilantly and carefully scrutinised before it is sanctioned. The abnormally heavy increase in expenditure is due to causes beyond the control of anybody.

"The Company is fully cognisant of the importance of a low Tramway tariff and supply rates. It is not in its interest to charge higher rates than is necessary. The old Horse Tramway Company was at liberty to charge 3 annas for every three miles. Notwithstanding, it reduced the fares of its own accord to one

anna uniform rate. And there is no reason to believe that when circumstances permit the B. E. S. & T. Company will fall behind its predecessor in this respect. The Company has just grounds for asking for an increase in fares and supply rates."

The Municipal Commissioner while forwarding the matter to the Corporation wrote as follows on 31st May 1922 :—

" If the Company is asked to adhere to the terms of the Deed of Concession concerning the fare in respect of the old lines, it may reasonably claim an adequate increase in respect of the new lines, whether they are beyond the area comprised in the old lines or are parallel or adjacent to those lines. Having regard to the heavy increase in expenses which has been referred to in the Company's letter under reference, it cannot, in fairness, be suggested that the Corporation should withhold their consent to enhanced fares being charged in respect of such extensions. A fare tariff based on such a differentiation of the lines would seriously affect short distance passengers living beyond the old lines and give rise to various anomalies. I am, therefore, of opinion that to insist on a rigid adherence to the aforesaid provisions of the Deed of Concession in the present circumstances would be detrimental to the interests both of the Tramways Company as well as the public generally and that the most equitable, though not the most simple, arrangement would be to divide the area traversed by the existing lines and the extensions now under contemplation into about half a dozen zones, to restrict the fare to an anna only in respect of a certain number of zones, having regard to the object of the Deed of Concession, and to allow an increase in the fare in respect of longer distances."

The Corporation referred the matter to the Tramways Committee by their Resolution No. 3929 of 3rd August 1922.

The Committee were of opinion that some variation in the rates of fares was necessary and that the fares should be fixed on the zone system referred to in the Commissioner's letter addressed by him to the Corporation on 31st May 1922. Before coming to a final decision, however, the Committee desired to receive definite proposals from the Company as to the levy of fares according to the zone system. The following letter dated the 28th September 1922 was therefore addressed by the Secretary to the Municipality :—

"With reference to your letter No. M.C./10/A. dated the 26th September 1922, I have the honour to submit herewith our proposals for increase in the tram fares based on zone system.

"After very careful consideration of the whole position and comparing all other alternatives, we have come to the conclusion that the division of the tramway system into six zones will give the Company a modest increase in the present revenue,

compensating in part the rise in all working expenses, with the minimum of disturbance to the public.

"As will be seen from the attached sketch map it is proposed that the system be divided into six zones as hereunder :—

- (1) Sassoon Dock—Museum.
- (2) Museum—Bori Bunder.
- (3) Bori Bunder—Opera House, Pydhowni, Prince's Dock.
- (4) Opera House, Pydhowni, Prince's Dock—Tardeo, Parsi Statue, Byculla Bridge, Mazagon.
- (5) Tardeo, Parsi Statue, Byculla Bridge, Mazagon—Lal Bag.
- (6) Lal Bag—Dadar.

"Under this scheme it is proposed to charge one anna fare for any two adjacent zones and one and a half annas for more than two zones.

"Thus it will be seen that for one anna a passenger can travel from :—

(1)	Sassoon Dock—Bori Bunder	..	..	1.93 miles.
(2)	Museum—Opera House	..	..	2.77 „
	Museum—Pydhowni	..	..	2.33 „
	Museum—Prince's Dock	..	..	2.57 „
(3)	Bori Bunder—Tardeo	..	..	2.53 „
	Bori Bunder—Parsi Statue (<i>via</i> Girgaum)			2.84 „
	Bori Bunder—Byculla Bridge	..	..	2.49 „
	Bori Bunder—Mazagon	..	..	2.74 „
(4)	Opera House—Lal Bag	..	..	3.15 „
	Pydhowni—Lal Bag	..	..	2.67 „
	Prince's Dock—Lal Bag	..	..	3.1 „
(5)	Parsi Statue—Dadar	..	..	3.84 „
	Byculla Bridge—Dadar	..	..	3.41 „

which averages 2.8 miles per one anna.

"The total number of fares from point to point is 1,296 as per attached table, out of which 828 are one anna and 468 one and a half anna fares. This gives an average of 1.18 annas, an increase of 2 pies over the existing fare, as compared with an average 2nd class fare of 1.5 annas in Calcutta."

The Municipal Commissioner's comments on the above letter were (his letter dated 18th October, 1922) :—

"I have discussed the question at some length with the Management of the Company and am satisfied that the proposals are reasonable. The increase suggested is estimated to mean an average of 2 pies extra per fare. There can be no doubt that

the claim as to the increase in the cost of running and maintenance is fully substantiated by the facts. It is true that the Company have latterly returned a dividend of not less than 10 per cent, but of recent years the provision for depreciation has not been very adequate. The Company have issued Rs. 1 crore of debentures during the last two years and must find an extra amount of about Rs. 7 lakhs per year to pay interest thereon. The object of the debentures has been the improvement of the service, extension, etc. The Company contend that unless the increase in fares suggested is approved they must decline to undertake further improvements of extensions and this position is not unreasonable. The increase, if approved, will still leave the service the cheapest in the world and on a consideration of all the circumstances I am of opinion that the Company's proposals should be accepted."

The Committee modified the scheme submitted in our letter of 28th September 1922 so as to extend the one anna fare journey from any two to any three adjacent zones. To this the Company took objection as the proposed modification would not to any appreciable extent add to our receipts as will be seen from the following facts contained in the letter addressed by the Secretary to the Municipal Commissioner on 30th October 1922 :—

" The total number of fares from point to point is 1,296, of which under the proposed modification there will be 1,134 one anna and 162 one and a half anna fares. Deducting from these the 38 one and a half anna fares in force at present, there will remain only 124 one and a half anna additional fares. Consequently the average fare works out at 1.06 anna, an increase of a little over half a pie.

" Calculating on the basis of the last year's result of 38 existing one and a half anna fares, we estimate that the 124 additional fares under the proposed modified scheme will yield an increase in our receipts of only about Rs. 70,000 per annum.

" Working from another point of view it yields the same result. From the Section between Dadar and Lal Bag to any point south of Pydhowni and Girgaum Portuguese Church and *vice versa* the existing fare is one and a half anna. Last year out of a total of 90,370,380 passengers we carried 700,000 one and a half anna fare. Under the proposed scheme we do not estimate at the outside more than 2,000,000 such additional fares which means an increase of about Rs. 62,500.

" This is further borne out by the fact that when in 1911-12 there was in force a zone scheme somewhat similar to the proposed scheme the daily increase amounted to only Rs. 100.

" Last year we carried about 40 lakhs of children for half fares which we are not bound to do under the Deed of Concession. Were we to withdraw this it would give us an increase of Rs. 1,25,000

which is about double what we would get under the Committee's proposed modification of our zone scheme.

" Great stress is being laid on the point that we agreed to charge only one anna fare on the then existing lines at the time of taking over the concern from the old Horse Tramway Company. Putting aside the abnormal increase both in the capital expenditure and operating expenses, we would in this connection point out that since then we have made 8 miles of extensions, on about 7 miles of which we are charging the same fares as on the old lines, which we are entitled to ask the Corporation to revise.

" As however this will entail a complication in the collection of fares, a simpler scheme has been submitted applicable to the whole system.

" It will thus be seen that the proposed modification is of no material help to us in meeting our requirements.

" In view of the above, I have the honour to request you to place the matter before the Tramways Committee for further consideration at an early date. "

1923.

After a good deal of negotiation, the Tramways Committee ultimately reported on 4th December 1922, recommending that the Company be allowed to charge one anna for two adjacent zones (the system being divided into 6 zones) and $1\frac{1}{2}$ annas for 3 or more zones. This Report was placed before a meeting of the Corporation on 19th February 1923. At this meeting Mr. P. J. Marzban proposed that the Report be approved and adopted. Mr. Golabchand Dewchand moved that the consideration of the Report be postponed till 1st April 1923, when the new Corporation would be formed. Dr. D. B. Master, who presided at the meeting, declared that the amendment was carried by a majority. A poll was demanded and the result of the poll was that 17 including the Chairman had voted against the amendment and 17 for the amendment. Dr. Master, who had as Chairman an additional or casting vote, exercised such vote against the amendment and declared that the amendment was lost. Mr. K. F. Nariman, a member of the Corporation, brought a Suit No. 753 of 1923 in the High Court of Bombay against the Municipal Corporation. The plaintiff said that 6 out of the 17 councillors who voted against the amendment were disqualified from voting having regard to Section 36, Clause (p) of the City of Bombay Municipal Act, and he asked for a declaration

by the Chairman that the amendment was lost was invalid and that the amendment was duly carried, and for an injunction restraining the Corporation from acting upon the said declaration of the Chairman. The Hon. Mr. Justice D. F. Mulla, who tried the Suit, found for the plaintiff and declared that the amendment was carried and restrained the defendants from doing any act inconsistent with the amendment, that is, proceeding further with the consideration of the Tramways Committee Report until 1st April 1923.

After the new Corporation was formed, the matter was referred to the Tramways Committee under Corporation Resolution No. 3915 dated the 4th July 1923, asking the Committee to reconsider the Committee's Report of 4th December 1922 regarding the revision of the then scale of Tramway fares. On 7th August 1923, the Committee came to the conclusion that the finances of the Company required to be supplemented to a certain extent in order to enable the Company to carry on further extensions of the Tramway System both in the interests of the Company and the travelling public. But at the same time the Committee were of opinion that any increase allowed to the Company should not be a burden on the poorer section of the population using the tram cars. They, therefore, recommended that the increase asked for by the Company in the Tramway fares be not sanctioned. *This Report* was adopted by the Corporation under their Resolution No. 5208 of 17th September 1923.

CHAPTER 9.

Fares on Gowalia Tank Extension.

The first application for an increased fare on the Gowalia Tank Extension was contained in letter No. 1397/24, dated 6th February 1924, from the General Manager of the Company to the Municipal Commissioner for the City of Bombay. This dealt with the general fare question and contained the following specific reference to the Gowalia Tank Extension :—

“ In the meantime, however, desiring as they always do to meet, so far as lies in their power, the requirements of the public of this City, my Directors propose to construct at an early date the following extensions of the Tramways System, namely :—

(a) From the present Terminus at Dadar to King's Circle ;

(b) From Grant Road Terminus to Gowalia Tank.

“ On these extensions, which, as you are aware, have already received the approval of the Corporation and the sanction of Government, it is the intention of my Directors to charge fares, as set out in the attached schedule, which they trust will meet with the approval of the Corporation. These fares have been worked out on a mileage basis as follows :—

(a) up to 2 miles 1 anna.

(b) over 2 and up to 5 miles .. 1½ anna.

(c) over 5 miles 2 annas.

“ In conclusion, I am to express the hope of my Directors that the Corporation will once again reconsider the matter, and agree to a scale of fares over the whole Tramways System in the City, including extensions, which would be fair to all interests concerned, and would conduce to the greatest convenience of the travelling public.

SUGGESTED FARE TABLE FOR GOWALIA TANK EXTENSION.

On basis of : up to 2 miles .. 1 anna.
 over 2 and up to 5
 miles .. 1½ anna.
 over 5 miles .. 2 annas.

From					To Gowalia Tank No. 35.
					Annas.
Sassoon Dock				Service No. 1	1½
Grant's Buildings				2	1½
Museum East				3	1½
Museum West				3a	1½
Ballard Pier				4	1½
Bori Bunder				5	1½
Crawford Market				6	1½
Dhobi Talao				7	1½
Carnac Bunder				8	1½
Princess Dock				9	1½
Girgaum P. Church				10	1
Opera House				10a	1
Pydhownie				11	1
Null Bazaar				12	1
C. P. Tank				13	1
Corner of Grant Road				14	1
Charni Road Junction				15	1
Grant Road				16	1
Foras Road Junction				17	1
Tardeo				18	1
Two Tanks				19	1
J. J. Hospital				20	1
Bellasis Road				20a	1
Mazagaon				21	1½
Parsi Statue				22	1
Jacob Circle				23	1½
Byculla Bridge				24	1
Victoria Gardens				25	1½
Lal Bagh				26	1½
Parel				27	1½
Dadar				28	2
Flora Fountain				29	1½
Sandhurst Bridge				30	1
Gol Pitha				31	1
Round Temple				32	1
Bhendi Bazaar				33	1
Reay Road				34	1½
Prathna Samaj				36	1
Tank Bunder				37	1½
King's Circle				38	2

The application of the Company was considered by the Tramways Committee of the Municipal Corporation, who, in their Thirteenth Report, dated the 7th May 1924, came to the following decision :—

“3. The Committee understand that the work of extending the Tramway lines to Gowalia Tank is already carried out. They have carefully considered, in consultation with the Commissioner, the proposal of the Tramways Company for levying a scale of enhanced fares on the line and recommend that the Company may be requested not to press for any increase of fares on the Gowalia Tank Extension owing to its short length and to arrange to run tram cars on this extension as soon as possible.”

Learning the nature of this decision the Company submitted an alternative fare proposal in their letter No. 7709/24, dated 13th June 1924, addressed to the Municipal Secretary :—

“My Directors have learnt from the Report of the Tramways Committee of the Corporation that they do not recommend any increase in the fares on the Gowalia Tank Road Extension.

“In view of the urgency of the matter and as a special case, my Directors have decided to amend their original proposal (set out in our letter No. 1397/24 of 6th February 1924) and to charge half anna fare over this extension which they hope will meet with the approval of the Corporation.

“My Directors desire me to intimate that they have come to this decision to save time and to meet the wishes of the Committee in regard to the early opening of this extension. It must be regarded as without prejudice to their claim to submit revised proposals for this and other extensions.”

Both these proposals came before the Municipal Corporation on the 23rd June 1924 and were rejected. Corporation Resolution No. 3059, dated 23rd June 1924, read as under :—

“That the Thirteenth Report, dated the 7th May 1924, of the Tramways Committee reconstituted by Corporation Resolution No. 2034, dated the 7th June 1923, regarding fares proposed to be charged on Tramway lines when extended to Gowalia Tank, etc., be approved and adopted and a copy be forwarded to the Commissioner for information and necessary action

“2. That copy of the letter, dated the 13th June 1924, from the Secretary, Bombay Electric Supply and Tramways Company, on the same subject, be also forwarded to the Commissioner with a request that he will inform the Company that their amended proposal is more detrimental to the interests of the public than their previous proposal.”

This resolution was formally acknowledged by the Company in letter No. 9946/24, dated the 2nd August 1924.

As the Gowalia Tank Extension, though complete was, not open to traffic, protest was made by residents in the locality. The next movement was made by the Municipal Corporation, who proposed arbitration in letter No. M.C. 26/A, dated 14th November 1924, from the Municipal Commissioner for the City of Bombay to the Company :—

“ With reference to the correspondence ending with your letter No. 9946/24 of 2nd August 1924, I have the honour, as desired by the Municipal Corporation, to draw your attention to the following clause with regard to extensions contained in the Deed of Concession, dated 7th August 1905 :—

“ Part of clause (a) : ‘ Provided always that it is hereby expressly agreed and declared that in the event of the B.E.S. & T. Co. refusing to lay down any line which the Commissioner may consider necessary, the Commissioner shall be at liberty either to hand over such line to any other person or Company to construct and work or to lay down such line at Municipal cost and the B.E.S. & T. Co. shall in such case supply the necessary electric power and work such line as part of the undertaking to be worked by the B.E.S. & T. Co., as hereinbefore provided, subject to such terms as may in case the parties do not agree to be decided by arbitration in pursuance of the provisions in that behalf hereinafter contained.’

“ The Corporation have further directed that in case no agreement be arrived at between themselves and your Company as regards the fare to be charged on the line extending from Grant Road Tram Terminus to Gowalia Tank Statue, the said dispute or difference be referred under Clause 25 of the said Deed of Concession to the arbitration of two independent members as provided for under the said clause.

“ I therefore request you to inform me whether you agree to work the line extending from Grant Road Terminus to Gowalia Tank Statue without any increase in the existing schedule of rates as sanctioned by the Corporation and if not to submit at an early date the name of an independent member to act as an arbitrator in your behalf.

“ I forward herewith for your information a copy of the Corporation Resolution (No. 6639 of 9th October 1924 referred to).”

Corporation Resolution No. 6639 of 9th October 1924.—

“ That the attention of the Tramways Company be urgently drawn through the Municipal Commissioner to the following clause with regard to the extensions contained in the Deed of Concession, dated 7th August 1905 :—

" Part of clause (a) : ' Provided always that it is hereby expressly agreed and declared that in the event of the B. E. S. & T. Co. refusing to lay down any line which the Commissioner may consider necessary, the Commissioner shall be at liberty either to hand over such line to any other person or Company to construct and work or to lay down such line at Municipal cost and the B.E.S. & T. Co. shall in such case supply the necessary electric power and work such line as part of the undertaking to be worked by the B.E.S. & T. Co., as hereinbefore provided, subject to such terms as may in case the parties do not agree to be decided by arbitration in pursuance of the provisions in that behalf hereinafter contained.'

"2. That in case no agreement be arrived at between the Corporation and the B.E.S. & T. Co. as regards the fare to be charged on the line extending from Grant Road Tram Terminus to Gowalia Tank Statue, the said dispute or difference be referred under Clause 25 of the said Deed of Concession to arbitration of two independent members as provided for under the said clause, and that the work of arbitration may be expedited."

The Company accepted this proposal by letter No. 14761/24, dated 11th December 1924, to the Municipal Commissioner for the City of Bombay :—

" I have the honour to acknowledge the receipt of your letter No. M.C./26/A under date the 14th November 1924, drawing my attention to the Clause with regard to extensions contained in the Deed of Concession dated the 7th August 1905, and informing me that the Corporation have directed that in case no agreement is arrived at with my Company regarding the fare to be charged on the line extending from the Grant Road Terminus to Gowalia Tank Statue, the said dispute or difference be referred under Clause 25 of the said Deed of Concession to arbitration of two independent members as provided for under the said Clause and enquiring whether my Company agrees to work the line extending from Grant Road Terminus to Gowalia Tank Statue without any increase in the existing schedule of rates as sanctioned by the Corporation and if not to submit at an early date the name of an independent member to act as an Arbitrator on behalf of the Company.

" I am directed to inform you in reply that, for the reasons set out in the correspondence ending with my letter No. 9946/24 of the 2nd August 1924, my Company is unable to agree to work the line in question without an increase in the existing schedule of rates as sanctioned by the Corporation.

" I am accordingly further directed to inform you that the Directors have appointed Sir Chimanlal Setalvad to act as Arbitrator on behalf of the Company.

" While on the subject of arbitration between the Company and the Municipal Corporation, I am directed to invite the attention of the Municipal Corporation to my letter No. 1397/24 of the 6th February 1924, in which I pointed out that under the

Deed of Concession of the 7th of August 1905, my Company is restricted to a standard charge of one anna over the whole of the Tramway System as it existed in 1905, but that an increased fare is contemplated over extensions constructed subsequent to the date of the Deed of Concession. I further pointed out that the Company realised that it would cause great inconvenience to the travelling public if the Company were to exercise the right to charge further and additional fares over such extensions but that, in view of the then recent decision of the Municipal Corporation under which the whole of the Company's proposals for an enhancement on fares on the combined system had been rejected, the only alternative left to the Company was to prepare a Schedule of Fares for introduction on or having regard to the extensions made up to that date, and to submit them to the Corporation for approval.

" This Schedule of Fares is in course of preparation, and will shortly be submitted to the Corporation for approval, and I am directed to suggest that, in the event of the Corporation declining to sanction such fares, the question whether or not the rates suggested should be charged by the Company over the extensions, and whether, if not, what other rates should be so charged, should be referred to the same tribunal as that to which it is now proposed to refer the dispute regarding the fare to be charged on the Gowalia Tank Extension."

Thereafter, arbitrators were appointed by the parties—Sir Chimanlal H. Setalvad by the Company and Mr. J. K. Mehta (Secretary of the Indian Merchants' Chamber) by the Municipality. The following "Agreement to refer to Arbitration" dated 7th December 1925 was then executed by the parties:—

"AN AGREEMENT made this Seventh day of December 1925 BETWEEN THE MUNICIPAL CORPORATION OF THE CITY OF BOMBAY incorporated under the City of Bombay Municipal Act 1888 (hereinafter referred to as the "Corporation") of the first part HUGH BYARD CLAYTON, C I E., I.C.S., Municipal Commissioner for the City of Bombay (hereinafter referred to as "the Commissioner") of the second part AND THE BOMBAY ELECTRIC SUPPLY AND TRAMWAYS COMPANY LIMITED incorporated under the Indian Companies Act 1913 (hereinafter referred to as "the Company") of the third part WHEREAS by a Deed of Concession dated the 7th day of August 1905 and made between the Corporation of the first part William Didsbury Sheppard the then Municipal Commissioner of the second part The Brush Electrical Engineering Company Limited of the third part and The Bombay Electric Supply and Tramways Company Limited incorporated and registered in England under the English Companies Acts 1862 to 1900 (hereinafter called "the English Company") of the fourth part it was *inter alia* agreed that the English Company should on the terms and subject to the conditions and restrictions thereafter

contained have and enjoy the exclusive right to construct maintain and work tramways in Bombay and should have authority to take tolls, fares and charges for the use of the tramway at rates to be fixed subject to the approval of the Corporation AND WHEREAS the rights and privileges conferred on the English Company by the said Deed of Concession of the 7th of August 1905 are now vested in the Company AND WHEREAS at the request of the Corporation a certain extension to the Tramway undertaking of the Company was laid down and constructed by the Company namely the Gowalia Tank Extension of 0.54 of a mile in length from the old Grant Road Tram Terminus at the intersection of Grant Road with Lamington Road along Gowalia Tank Road to a point in Gowalia Tank Road near the Petit Statue there (hereinafter referred to as "the said Gowalia Tank Extension") which extension was completed in or about the month of June 1924 AND WHEREAS a dispute has arisen under the said Deed of Concession between the first and second parties hereto on the one hand and the third party hereto on the other hand as to the fare or fares (if any) which the Company is entitled to charge over the said Gowalia Tank Extension and accordingly the Corporation has required that the said dispute be referred under Clause 25 of the said Deed of Concession to arbitration AND WHEREAS the Corporation has nominated and appointed J. K. Mehta, Esquire, M. A., as one of the said Arbitrators and the Company has nominated and appointed Sir Chimanlal Setalvad, Knight, as the other of the said Arbitrators both of whom have agreed to act NOW THEREFORE IT IS HEREBY AGREED by and between the parties hereto as follows. --

1. That the question whether the Company is entitled to charge any and if so what fare or fares additional to the uniform fare of one anna referred to in Clause 15 of the Deed of Concession over the said Gowalia Tank Extension is hereby referred to the said Arbitrators and an Umpire who agrees to act and who shall be appointed by the said Arbitrators before entering upon this Arbitration.

2 That the said Arbitrators and the Umpire so appointed shall thereupon enter upon the Arbitration, call upon the parties hereto to state their respective contentions, hear evidence if necessary consider such documents, evidence and arguments as may be produced before them (with power to compel discovery and production of documents and attendance of witnesses) and make and issue their award upon the said dispute including an award as to the costs of the said reference and award which shall be in the discretion of the said Arbitrators and Umpire with power to the Arbitrators or the Umpire to submit a stated case on any question or questions of Law arising in this arbitrations to the High Court of Judicature in Bombay for opinion and judgment of the Court with all competent rights of appeal therefrom

3. That the said Arbitrators and the said Umpire shall make and publish their award within one month from the date

of these presents with power from time to time to extend the time for any one period or further periods of one month by an endorsement or endorsements made to that effect on these presents and the award or awards partial, interim and final following hereon shall be binding upon the parties.

IN WITNESS WHEREOF the respective Seals of the Municipal Corporation and The Bombay Electric Supply and Tramways Company Limited have been hereunto duly affixed and the said Hugh Byard Clayton as Municipal Commissioner has hereunto set his hand and seal the day and year first above written."

While forwarding the above agreement to refer to Messrs. Crawford Bayley & Co., the Municipal Solicitors, the Company's Solicitors, Messrs. Craigie Blunt & Caroe, wrote on the 28th November 1925 as follows :—

" We have now received from our clients and beg to send to you herewith Agreement to Refer, to which the Common Seal of our client has been affixed.

" Will you now be good enough to have the agreement executed by your clients and to let us know when this has been done so that arrangements can be made to proceed with the reference ?

" We are instructed to place it on record when returning this agreement, that as the rates suggested by our clients to be charged over the other extensions have not been sanctioned by the Corporation all questions relating to the said rates to be so charged will be referred under another agreement to refer either to the same arbitrators or other arbitrators at an early date."

The Company's request to the Arbitrators was as follows :-

" The Company approaches the arbitrators with a request that the fares fixed on this Extension shall be half an anna, *i.e.* from any point on the Gowalia Tank Extension to the old terminus at Grant Road the fare shall be half an anna, and to any point beyond Grant Road Terminus one and a half anna. It may be asked, why do the Company fix on a fare of half an anna on this Extension and not one of three quarters of an anna or one quarter of an anna ? The reply is that three quarters of an anna would be a fare difficult to collect. A fare of a quarter of an anna would also be difficult to collect, and it would increase the loss on the cost of constructing and working the Extension which in any circumstances seems to be inevitable.

" In the alternative, the Company is willing to accept a fare table based on a mileage of say up to two miles one anna ; over two miles and up to five miles one and a half anna ; and over five miles two annas."

Sir Thomas Strangman and Mr. B. J. Desai were briefed by the Company. The following was the award made by the Arbitrators on the 8th February 1926 :—

“To all to whom these presents shall come WE CHIMANLAL H. SETALVAD and J. K. MEHTA send greeting: Whereas by an Agreement in writing dated the 7th day of December 1925 and made between the Municipal Corporation of the City of Bombay of the first part Hugh Byard Clayton, C.I.E., I.C.S., Municipal Commissioner for the City of Bombay of the second part and The Bombay Electric Supply and Tramways Co., Ltd., of the third part AFTER RECITING that a dispute had arisen under the Deed of Concession dated the 7th day of August 1905 more particularly referred to therein between the first and second parties thereto on the one hand and the third party thereto on the other hand as to the right of the said Company to charge certain fare or fares referred to therein AND AFTER RECITING that the Corporation had nominated and appointed the said J. K. Mehta as one of the Arbitrators and the Company had nominated and appointed Sir Chimanlal H. Setalvad, Kt., as the other Arbitrator IT WAS AGREED between the parties to the said agreement as follows, namely :—

“1. That the question whether the Company is entitled to charge any and if so what fare or fares additional to the uniform fare of one anna referred to in Clause 15 of the Deed of Concession over the said Gowalia Tank Extension is hereby referred to the said Arbitrators and an Umpire who agrees to act and who shall be appointed by the said Arbitrators before entering upon this Arbitration.

“2. That the said Arbitrators and the Umpire so appointed shall thereupon enter upon the Arbitration, call upon the parties hereto to state their respective contentions, hear evidence if necessary consider such documents, evidence and arguments as may be produced before them (with power to compel discovery and production of documents and attendance of witnesses) and make and issue their award upon the said dispute including an award as to the costs of the said reference and award which shall be in the discretion of the said Arbitrators and Umpire with power to the Arbitrators or the Umpire to submit a stated case on any question or questions of law arising in this Arbitration to the High Court of Judicature in Bombay for opinion and judgment of the Court with all competent rights of appeal therefrom.

“3. That the said Arbitrators and the said Umpire shall make and publish their award within one month from the date of these presents with power from time to time to extend the time for any one period or further periods of one month by an endorsement or endorsements made to that effect on these presents and the award or awards partial, interim and final following hereon shall be binding upon the parties.

AND WHEREAS on the 14th of January 1926 the parties by an endorsement made on the said Agreement and signed on their behalf by their respective lawyers agreed that the period

for making and publishing the Award shall be one month from the said 14th of January 1926 with power to the Arbitrators or the Umpire to extend the time for any one period or further period of one month as provided by Clause 3 of the Agreement of Reference AND WHEREAS at a meeting of the said Arbitrators and of the parties to this Reference held on the 14th day of January 1926 we the said Chimanlal H. Setalvad and J. K. Mehta appointed Mr. Dinshaw Fardunji Mulla to be the Umpire in accordance with the said Agreement AND WHEREAS by a writing dated the 2nd day of February 1926 it was agreed between the parties to the Reference that an Award be made by the Arbitrators, or, failing agreement between the Arbitrators, by the Umpire AND WHEREAS the said Arbitrators and Umpire have heard and considered the witnesses and evidence of both the parties and the said Arbitrators have agreed as to all the points referred to them NOW KNOW YE that we the said Chimanlal H. Setalvad and J. K. Mehta hereby find and award as follows, that is to say :—

" 1. We award that the Tramway Company is entitled to charge half an anna fare additional to the uniform fare of one anna referred to in clause 15 of the Deed of Concession, over the Gowalia Tank Extension.

" 2. We the said Chimanlal H. Setalvad and J. K. Mehta fix the fee of the Umpire at Rs. 5,000.

" 3. We award that the fees of the Arbitrators as agreed to be paid by the respective parties, namely Rs. 1,500 to the Arbitrator nominated by the Corporation and Rs. 5,000 to the Arbitrator nominated by the Tramway Company and the afore-said fee of the Umpire be borne and paid by the Corporation and the Tramway Company in equal shares.

" 4. As regards all other costs of and incidental to this Reference we award that each party do bear their own costs.

AS WITNESS our hands this 8th day of February 1926.

Witnessed by

(Sd.) B. D. LAM.

(Sd.) CHIMANLAL H.
SETALVAD.

(Sd.) MUNMOHUNDAS RAMJI
HORA.

(Sd.) J. K. MEHTA."

When the question of fares on extensions of tram lines laid since 1905 was settled between the Corporation and the Company (*vide* Corporation No. 8830 of 20th December, 1928), the following rates were fixed and introduced from 1st March, 1929 :—

" That outside the half anna fare limits of the Gowalia Tank Road Extension a fare of one anna be charged for any journey covering a distance of two and a half miles to and from the Gowalia Tank Terminus and a fare of one and a half annas beyond such limits."

CHAPTER 10.

Fares on Tank Bunder Extension.

The first reference to fares to be charged on the Tank Bunder Extension was contained in the Company's letter applying for the Extension (No. 9223/23 dated the 27th July, 1923). Paragraph 5 of this letter set out the fares proposed to be charged on the Extension, and is as follows :—

“ We do not propose to introduce any special fare tariff on this extension, pending the decision of the Municipal Corporation in regard to a complete revision of that tariff. But, failing a suitable revision, we would propose to charge fares thereon on the same scale as those in force on the tramways north of Lal Bagh.”

The Municipal Corporation sanctioned the Extension in Resolution No. 4122 dated 9th August, 1923, which is as follows :—

“ That in the circumstances stated in the Commissioner's letter No. E.G. 115/A dated the 4th August, 1923, sanction be given, under Section 293(1) of the Municipal Act, to the Bombay Electric Supply and Tramways Company Limited, being allowed to extend their lines from their present terminus in Reay Road (near Victoria Road Overbridge) along that Road to a point on New Jackeria Bunder Road, approximately adjacent to the northern boundary of the new Mazagaon Cotton Depot, as indicated on the Company's Route Plan No. 31-A, received with the letter on the terms and conditions mentioned in paragraph 4 of the letter from the General Manager of the Company, No. 9223, dated the 27th July, 1923.”

It will be noticed that the Corporation sanctioned the Extension in terms of paragraph 4 of the Company's letter, which dealt entirely with constructional details, whilst the proposal to charge additional fares was contained in paragraph 5. The question arose whether this omission of any reference to paragraph 5 and the other parts of the letter of application was accidental or made on purpose. The Company was informed by the Municipal Commissioner that it was accidental. He stated so at a Meeting of the Tramways Committee of the Corporation, and said it was due to an error of the Secretary. But the Company was not in a position to produce evidence to this effect, unless the Commissioner could be called to give evidence before the Arbitrators.

suitable revision, we would propose to charge fares thereon on the same scale as those in force on the tramways north of Lalbagh.

" In sanctioning this extension the Corporation (Resolution No. 4122) took no exception to this proposal.

" In notifying to the Corporation the pending completion of the work (my letter No. 12459/23 of the 11th October, 1923) I again intimated to the Corporation the proposal of the Company in regard to the fares to be charged over the extension in the following passage :—

" Pending the decision of the Municipal Corporation in regard to a complete revision of our tariffs, we will charge fares thereon on the same scale as those in force on the Tramways north of Lalbagh."

" No objection was raised by the Corporation to the Company's proposal and when the line was opened for traffic on October 23rd, 1923, the scale of fares proposed was charged. The first intimation which we have received of the Corporation's disapproval of the fares charged was the letter under reply, written sixteen months after my first communication, and thirteen months after the line was opened for public traffic, and fares had been charged as in my letter dated the 11th October, 1923.

" My Directors considered that under the circumstances the proposed fares met with the approval of the Corporation.

" As, however, the Corporation now contends that the charge is illegal, a contention which the Board of Directors regret that they cannot admit, I am directed to suggest that the question whether or not the said charge has been approved by the Corporation or if not whether or not the fare in question should be charged by the Company over the Tank Bunder Extension and whether, if not, what other fare should be so charged, should be submitted to arbitration for decision."

The facts emerging from the above were :

- (1) That the Company had, under Section 15(2) of the Deed of Concession, the right to charge a fare higher than one anna on the Tank Bunder Extension with the approval and sanction of the Municipal Corporation.
- (2) That the approval and sanction of the Municipal Corporation to a higher fare on the Tank Bunder Extension were implied in :—

Their sanction to the Extension on 27th July, 1923, when the General Manager specifically stated in his letter of application that a higher fare would be charged ; and

When the General Manager repeated, in his letter No. 12459/23 of the 11th October, 1923, announcing that the extension was ready to be opened, that the higher fare would be charged ;

When the Municipal Corporation accepted these notices without demur, and allowed the higher fares to be charged without protest, from the date of their imposition on 23rd October 1923 until their letter of objection of 18th November 1924.

- (3) That the higher fare of half an anna charged was fair and reasonable, because half an anna is the only workable unit and even this charge would involve the Company in continuous loss, *i.e.*

	Rs.
For the first three years	41,211
For the next two years (<i>i.e.</i> , with interest at 5 per cent.)	50,353
Thereafter (<i>i.e.</i> , with full interest charges at 8½ per cent)	72,051

Therefore the Company maintained that they had full right to levy the higher fare charged on the Tank Bunder Extension.

The Corporation by their Resolution No. 11466 of 19th February 1925 referred the matter to the Tramways Committee. The opinion of the Advocate-General, Sir J. B. Kanga, was obtained twice and the Corporation was advised as follows—once on 16th June 1925 and again on 8th March 1926 :—

Opinion of Sir J. B. Kanga, Advocate-General, dated 16th June 1925.

“ I am inclined to think that the Corporation agreed that in case a suitable revision was not arrived at fares thereon would be charged on the same scale as those in force on the Tramways North of Lalbaug. In his letter to the Corporation, dated 4th August 1923, the Commissioner drew attention to the proposal of the Company in para. 5 of the Company's letter, dated 27th July 1923. The Corporation by its Resolution No. 4122, dated the 9th August 1923, granted sanction to the proposed extension on the terms and conditions mentioned in para. 4 of the letter, dated 27th July 1923. I think the Corporation impliedly agreed to the proposal of the Company in the said para. 5. The Company commenced the work on 13th August. On 11th October 1923 the Company wrote that they would charge fares on the same scale as those in force on the Tramways North of Lalbaug pending the decision of the Corporation in regard to a complete revision of tariffs. No exception was taken to what was stated in the letter of 11th October 1923. I further think that by the conduct of the Corporation the Company was led to believe that the Corporation agreed to the proposals in the said para. 5 and acted upon such belief and commenced the work and the Corporation cannot now contend that the Corporation did not agree to the proposal in the said para. 5.

When the Extension was approaching completion and was almost ready for traffic, the Company, in notifying the Municipal Corporation of this fact, reiterated its intention to charge increased fares thereon in its letter No. 12459/23, dated 11th October, 1923, to the Municipal Commissioner for the City of Bombay :—

“ Adverting to my letter No. 9223/23 of 27th July, 1923, to your address, I have the honour to inform you that, subject to the official inspections proving satisfactory on the 19th instant, we hope to open the Reay Road Extension for the conveyance of passengers to TANK BUNDER (our name for the terminus at the new Cotton Depot) on Monday, 22nd instant, and that, pending the decision of the Municipal Corporation in regard to a complete revision of our traffic, we will charge fares thereon on the same scale as those in force on the Tramways north of Lal Bagh, as indicated in my letter referred to above.”

No objection was taken to this proposal, and from the date of the opening of the Tank Bunder Extension extra fares on the basis laid down in the correspondence with the Municipal Corporation were charged, namely, half an anna over the extension. The first indication that the Corporation objected to this practice was contained in letter No. 8384 dated 18th November, 1924, from the Municipal Secretary, Bombay Municipality to the Company which read as under :—

“ I have the honour, by desire of the Municipal Corporation of Bombay, to forward to you the accompanying copy of a report of their Tramways Committee regarding suggestions for extensions of certain tram lines and complaint about extra fares being charged on a certain line and to state that under the circumstances stated in paragraph 4 thereof the Corporation are of opinion that the action of your Company in demanding extra fares is illegal and that therefore they should discontinue the same and apply for the necessary sanction of the Corporation in the matter.”

Paragraph 4 of the 25th Report of the Tramways Committee of the Corporation dated 18th August, 1924 :—

“ 4. As to the complaint about extra fares charged by the Company for going from Tank Bunder to Prince's Dock a question was raised as to whether any sanction of the Corporation had at all been obtained by the Company for demanding increase in the fares in view of the fact that under their Resolution No. 4122, dated the 9th August, 1923, the Corporation had sanctioned the Company's proposal for the extension of their lines from their present terminus in Reay Road (near Victoria Road Overbridge) along that road to a point on New Jackeria Bunder Road approximately adjacent to the northern boundary of the New Maza-gaon Cotton Depot on conditions laid down in paragraph 4 of their

letter to the Commissioner No. 9223, dated the 27th July, 1923, and on the understanding that the Company did not propose to introduce any special fare tariff on this extension pending the decision of the Corporation in regard to a complete revision of their tariff. It was however contended by Mr. Lucas, who attended the Committee's Meeting as a representative of the Tramways Company, that in paragraph 5 of their letter above referred to, the Company had stated that they did not propose to introduce special fare tariff on this extension till the question of the revision of the tariff was settled but that it was also stated in the same para. that in case a suitable revision was not arrived at, they would propose to charge fares thereon on the same scale as those in force on the tramways north of Lalbagh. As nothing was said in the Corporation Resolution referred to above regarding this proposal Mr. Lucas said that the Company were justified in charging fares for this extension as proposed by them. The Committee, however, are of opinion that the extra fare charged by the Tramways Company over their extension from Reay Road up to the northern boundary of the New Mazagaon Cotton Depot has not been sanctioned by the Corporation and that the action of the Company in demanding increased fares is illegal and the Company should be called upon to discontinue the same and apply for the necessary sanction of the Corporation."

To this the Company replied in the following terms by their letter No. 14760/24, dated 11th December, 1924, to the Municipal Commissioner for the City of Bombay :—

" I have the honour to acknowledge the receipt of the Municipal Secretary's letter No. 8384 of the 18th November, 1924, and of the copy report of the Tramways Committee regarding suggestions for extensions of certain tram lines, and complaint about extra fares being charged on a certain line ; and stating that under the circumstances mentioned in paragraph 4 of the Report the Corporation are of opinion that the action of my Company in demanding extra fares is illegal and that therefore they should discontinue the same and apply for the necessary sanction of the Corporation.

" I will address you separately on the subject of the suggested extension, when the engineering and traffic aspects have been investigated.

" As to the complaint regarding the extra fares charged on the Tank Bunder Extension, the Board regret their inability to agree with the opinion of the Corporation, and for the following reasons :—

" When applying for sanction to the Tank Bunder Extension (my letter No. 9223/23 of the 27th July, 1923) I stated in para. 5 thereof as follows :—

" We do not propose to introduce any special fare tariff on this extension, pending a decision of the Municipal Corporation in regard to a complete revision of that tariff. But failing a

suitable revision, we would propose to charge fares thereon on the same scale as those in force on the tramways north of Lalbagh.

" In sanctioning this extension the Corporation (Resolution No. 4122) took no exception to this proposal.

" In notifying to the Corporation the pending completion of the work (my letter No. 12459/23 of the 11th October, 1923) I again intimated to the Corporation the proposal of the Company in regard to the fares to be charged over the extension in the following passage :—

" Pending the decision of the Municipal Corporation in regard to a complete revision of our tariffs, we will charge fares thereon on the same scale as those in force on the Tramways north of Lalbagh."

" No objection was raised by the Corporation to the Company's proposal and when the line was opened for traffic on October 23rd, 1923, the scale of fares proposed was charged. The first intimation which we have received of the Corporation's disapproval of the fares charged was the letter under reply, written sixteen months after my first communication, and thirteen months after the line was opened for public traffic, and fares had been charged as in my letter dated the 11th October, 1923.

" My Directors considered that under the circumstances the proposed fares met with the approval of the Corporation.

" As, however, the Corporation now contends that the charge is illegal, a contention which the Board of Directors regret that they cannot admit, I am directed to suggest that the question whether or not the said charge has been approved by the Corporation or if not whether or not the fare in question should be charged by the Company over the Tank Bunder Extension and whether, if not, what other fare should be so charged, should be submitted to arbitration for decision."

The facts emerging from the above were :

- (1) That the Company had, under Section 15(2) of the Deed of Concession, the right to charge a fare higher than one anna on the Tank Bunder Extension with the approval and sanction of the Municipal Corporation.
- (2) That the approval and sanction of the Municipal Corporation to a higher fare on the Tank Bunder Extension were implied in :—

Their sanction to the Extension on 27th July, 1923, when the General Manager specifically stated in his letter of application that a higher fare would be charged ; and

When the General Manager repeated, in his letter No. 12459/23 of the 11th October, 1923, announcing that the extension was ready to be opened, that the higher fare would be charged ;

When the Municipal Corporation accepted these notices without demur, and allowed the higher fares to be charged without protest, from the date of their imposition on 23rd October 1923 until their letter of objection of 18th November 1924.

- (3) That the higher fare of half an anna charged was fair and reasonable, because half an anna is the only workable unit and even this charge would involve the Company in continuous loss, *i.e.*

	Rs.
For the first three years	41,211
For the next two years (<i>i.e.</i> , with interest at 5 per cent.)	59,353
Thereafter (<i>i.e.</i> , with full interest charges at 8½ per cent.)	72,051

Therefore the Company maintained that they had full right to levy the higher fare charged on the Tank Bunder Extension.

The Corporation by their Resolution No. 11466 of 19th February 1925 referred the matter to the Tramways Committee. The opinion of the Advocate-General, Sir J. B. Kanga, was obtained twice and the Corporation was advised as follows—once on 16th June 1925 and again on 8th March 1926 :—

Opinion of Sir J. B. Kanga, Advocate-General, dated 16th June 1925.

“ I am inclined to think that the Corporation agreed that in case a suitable revision was not arrived at fares thereon would be charged on the same scale as those in force on the Tramways North of Lalbaug. In his letter to the Corporation, dated 4th August 1923, the Commissioner drew attention to the proposal of the Company in para. 5 of the Company's letter, dated 27th July 1923. The Corporation by its Resolution No. 4122, dated the 9th August 1923, granted sanction to the proposed extension on the terms and conditions mentioned in para. 4 of the letter, dated 27th July 1923. I think the Corporation impliedly agreed to the proposal of the Company in the said para. 5. The Company commenced the work on 13th August. On 11th October 1923 the Company wrote that they would charge fares on the same scale as those in force on the Tramways North of Lalbaugh pending the decision of the Corporation in regard to a complete revision of tariffs. No exception was taken to what was stated in the letter of 11th October 1923. I further think that by the conduct of the Corporation the Company was led to believe that the Corporation agreed to the proposals in the said para. 5 and acted upon such belief and commenced the work and the Corporation cannot now contend that the Corporation did not agree to the proposal in the said para. 5.

Opinion of Sir J. B. Kanga, Advocate-General, dated 8th March 1926.

"I adhere to my opinion given on 12th June 1925. If definite proposals were placed before the Corporation and specific sanctions were taken there would have been no difficulty. The question is *whether the Corporation impliedly agreed*. I have stated facts and given reasons in my 1st opinion as to why I think there was an implied agreement. The Corporation took no exception to what was stated in the Company's letter of 11th October 1923. What was done by the Tramway Company on other occasions has nothing to do with the present case."

Meanwhile, Mr. Lakhmidas Rowjee Tairsee brought Suit No. 2198 of 1926 against the Company in the Small Causes Court, to recover from the Company annas two, alleging that the Company had charged him six, instead of four annas, in respect of four tickets purchased by him for himself and three friends on 3rd August, 1924, for a tram ride from General Post Office to Cotton Green, Tank Bunder, otherwise known as Reay Road Extension. Judge Indranarayan B. who delivered the judgment on 15th April, 1926, held that the 1½ anna charge per ticket was illegal for want of the necessary and express sanction of the Corporation and the Company was bound to refund two annas to the plaintiff.

The Company appealed against this judgment. The Full Bench consisting of Jhaveri, C.J. and Chitre, J., reversed the decision of the lower court and held that where the statute (Bombay Tramways Act, 1874) gives any rights and powers to the Corporation, and where the Corporation is invested with certain rights under a Deed (of Concession) which also provides for a breach of the terms, the proper person to sue is the Corporation and not the rate-payer or member of the public. The plaintiff had, therefore, so the Court decided, no cause of action.

On 25th August, 1926, Mr. Tairsee wrote to the Corporation asking them to deduct the sum of annas two (being the amount of excess fare at the rate of half an anna on four tickets paid by him) from the Rs. 15,000 deposited by the Company with the Municipality.

All these matters were brought before the Corporation, who, by their Resolution No. 10948, of 28th February, 1929, resolved that as the Advocate-General had advised them that they had impliedly agreed to the charging of the fare in dispute no further action could be taken. The Company and Mr. Tairsee were advised accordingly and the matter thus came to an end.

CHAPTER 11.

Fares on Extensions of Tramways.

1924.

In spite of the adverse decision of the Corporation (17th September, 1923) to the effect that no alterations in the tariff of fares charged on the Tramways System should be sanctioned, the Company sought to establish its legal rights in the matter of extensions made since 1905.

The following letter (No. 1397/24), dated the 6th February 1924 was therefore addressed by the General Manager to the Municipal Commissioner :—

“ It was with very great regret that my Directors learned of the decision of the Corporation, to the effect that no alteration in the tariff of fares charged on the Tramways System should be sanctioned.

“ With a view to remove any possibility of misunderstanding, it is desirable to draw the attention of the Corporation to the fact, that, under the Deed of Concession, my Company is restricted to charge a standard rate of one anna on the whole of the Tramways System as it existed in 1905, while higher fares are permissible on all extensions constructed subsequent to the execution of the Deed of Concession.

“ My Company realised that it would cause great inconvenience to the travelling public, if they were to exercise the right, which legally vests in them, of charging higher fares on all the extensions constructed since 1905. The Corporation will appreciate the point, when I state that on the date, when the Deed of Concession was executed, the Tramways System comprised 17 route miles of track. It now comprises 25.8 miles approximately, an increase of over, 50 per cent. Except in one or two cases, which lent themselves readily to slightly increased fares, my Company has consented itself with charging only one anna on most of the extensions also. They did so in the firm conviction that the Corporation would recognise the great inconvenience, which the travelling public would be put to if a different scale of fares were levied on the extensions. They felt that, in the public interest, it was desirable that the scale of fares should be so regulated throughout the whole system as would be easily intelligible to the travelling public, and as would conduce to their greatest convenience.

" With this idea in mind, my Company has been carrying on negotiations with the Corporation for many years, but only recently has a final decision been reached, under which the whole of our proposals for an enhancement of the fares on the combined system have been rejected.

" The only alternative, left to my Company is to prepare a schedule of higher fares for introduction on the extensions, which have been made up to date, and to submit them to the Corporation for approval. I am at present engaged in working out this schedule, and when it is ready I will, under the instructions of my Directors, submit it to you for the approval of the Corporation.

" In the meantime, however, desiring as they always do to meet, so far as lies in their power, the requirements of the public of this City, my Directors propose to construct at an early date the following extensions of the Tramways System, namely—

- (a) from the present Terminus at Dadar to King's Circle ;
- (b) from Grant Road Terminus to Gowalia Tank.

" On these extensions, which, as you are aware, have already received the approval of the Corporation and the sanction of Government, it is the intention of my Directors to charge fares, on a mileage basis as follows —

- (a) up to 2 miles 1 anna.
- (b) over 2 and up to 5 miles .. 1½ anna.
- (c) over 5 miles 2 annas.

" In conclusion, I am to express the hope of my Directors, that the Corporation will once again reconsider the matter, and agree to a scale of fares over the whole Tramways System in the City, including extensions, which would be fair to all interests concerned, and would conduce to the greatest convenience of the Travelling public.

As the Tramways Committee and the Corporation were busy with the fares on the extensions of tramway lines to Gowalia Tank Road and King's Circle, the above matter was not taken up during the year.

1925.

The General Manager wrote the following letter to the Municipal Commissioner (No. 939/25) on 26th January 1925 :—

" In continuation of previous correspondence ending with our letter No. 14761/24, dated 11th December 1924, I have the honour to request you to place the following application before the Municipal Corporation for an increase in the fares charged on certain of the extensions made to the Tramways System since the date of the Deed of Concession, viz. 7th August 1905.

" Under that Concession the Company is limited by Clause 15 (a) to a universal fare of 1 anna from any one point to any other point on the line then existing, but that in respect of any extensions made since that date the fares to be fixed shall be subject to the approval of the Corporation.

" Since the date of the Concession the Company has constructed nearly 9 miles of extensions. The ratio of working expenses to revenue has increased from 48 per cent. in 1913, the year before the war, to 68 per cent. in 1924.

" A schedule of the fares we propose to charge on these extensions is attached herewith.

" We have included in this schedule a revised scale of fares in part applicable to the Tank Bunder Extension. The actual fares to be charged on this extension, considered by itself, are now before the Municipal Corporation and it has been proposed that any dispute there anent should be referred to arbitration. But in applying for approval for an extra fare over all the extensions constructed since 1905 (with the exception of the Gowalia Tank Extension) it is necessary to submit a schedule which shall be based on a general principle and equitable to all passengers. The present schedule, in so far as it effects the Tank Bunder Extensions constitutes a variation from the fares charged on that Extension referred to in our letter No. 14700/24, dated the 11th December 1924, but this is necessary to secure equality of treatment for all passengers, irrespective of the service which they may use.

" Should any difference of opinion arise between the Municipal Corporation and the Company in connection with this application for increased fares, I have the honour to request that the dispute may be referred to the same Arbitration Tribunal."

Suggested fares on extensions made since 1905 and on those in Prospect.

<i>Sandhurst Bridge to Wari Bunder or vice versa</i>					
(1.729 miles)	..	..	..	..	1 anna.
Any station South	..	..	..	..	1½ anna.
Any station North..	..	..	..	..	1½ anna.
<i>Wari Bunder to Tank Bunder or vice versa</i>					
(2.019) miles	..	..	..	..	1 anna.
Any station South of Sandhurst Road Line	..	..	..	..	1½ anna.
Any station North of Sandhurst Road Line	..	..	..	..	1½ anna.
Any station on Sandhurst Road Line	..	..	..	..	1½ anna.
<i>Girgaum to Byculla Bridge or vice versa (1.707 miles)</i>					
..	..	..	..	..	1 anna.
Any other station	..	..	..	..	1½ anna.
<i>Tardeo to Foras Road junction or vice versa (0.417 miles)</i>					
..	..	..	..	..	½ anna.
Any other station	..	..	..	..	1½ anna.

<i>Opera House to Girgaum or vice versa</i> (0.170 miles)	No extra charge.
<i>Flora Fountain to Dhobi Talao via Esplanade Road or vice versa</i> (0.845 miles)	No extra charge.
<i>Lal Baug to Dadar or vice versa</i> (1.975 miles) ..	1 anna.
Any station North beyond Dadar (28) ..	1½ anna.
Any station South as far as Byculla Bridge ..	1 anna.
Any station beyond Byculla Bridge ..	1½ anna.
<i>Dadar to King's Circle or vice versa</i> (0.757 miles)	1 anna.
Any station South as far as Lal Baug ..	1½ anna.
Any station beyond Lal Baug up to the line	} 2 annas.
Dhobi Talao ..	
Crawford Market ..	
Carnac Bunder ..	} 2½ anna.
Any station South of these stations	

(In prospect).

The matter was referred to the Tramways Committee, who reported on 27th April 1925 that no case for the revision of fares that had already been fixed had been made out by the Tramways Company and that the demand for the revision of fares did not come within the scope of arbitration. This was confirmed by the Corporation Resolution No. 3784 of 13th July 1925.

1926.

As the arbitration regarding the fares to be charged on the Gowalia Tank Extension was pending, the Board decided that no action should be taken until a decision on that issue was reached. As the Arbitrators in the Gowalia Tank case issued their decision on 8th February 1926 endorsing the main contentions of the Company that it was entitled to an additional fare on an extension constructed since 1905, and that the additional fare proposed by the Company was a reasonable fare, the Board now decided that the question of additional fares on other extensions constructed since 1905, should be prosecuted.

The General Manager then wrote as follows to the Municipal Commissioner (No. 4000/26) on 10th April 1926 in reply to the Corporation Resolution No. 3784 of 13th July 1925 :—

“ My Company are advised that the view taken by the Corporation as to the scope of the Deed of Concession is erroneous ; that the Company are entitled to demand an arbitration in case the Corporation refuse to approve a fare fixed by the Company for

any extension ; and should the Corporation refuse to appoint an Arbitrator that the Company are entitled to proceed as laid down in the Indian Arbitration Act, i.e., to appoint their Arbitrator as sole Arbitrator in the reference."

Meanwhile, the Tramways Committee at their meeting held on 2nd August 1926 considered the Corporation Resolution No. 15100 of 15th March 1926 regarding a suggestion to charge one anna tram fare only on Gowalia Tank Extension within a radius of $2\frac{1}{2}$ or 3 miles and an additional $1\frac{1}{2}$ anna fare beyond the said radius. As the Company was in favour of this suggestion, the Acting General Manager informed the Committee that his Board intended to address the Corporation on the question of fares to be charged on all their extensions and that in that letter they would submit their views in connection with the Gowalia Tank Extension also. It was thereupon agreed by the Committee that consideration of the question be postponed pending receipt of the Tramway Company's aforesaid letter.

1927.

The General Manager thereafter addressed the following letter (No. 406/27) to the Municipal Secretary on 14th January 1927 :—

" In view of the position determined by the Gowalia Tank Extension (Fares) Arbitration, I have the honour, by instructions of the Board, to request you to lay before the Municipal Corporation, for their consideration, the following schedule of fares which the Company proposes to charge on those parts of the system which are not covered by the one anna fare prescribed in 'Clause I' of the Deed of Concession dated the 7th August 1905 .—

No.	Extension.	Opened.	Length.	Fare proposed.
			Miles	Annas.
1	Lal Bag—Parel	Aug. 1907	0.987	1
2	Parel—Dadar	June 1917	0.988	
3	Girgaum Portuguese Church —Byculla Bridge	Nov. 1907	1.707	1
4	Tardeo Terminus—Gulder Street	Nov. 1908	0.306	$\frac{1}{2}$
5	Opera House—Girgaum Por- tuguese Church	Jan. 1919	0.170	$\frac{1}{2}$
6	Dhobi Talao—Flora Foun- tain	Nov. 1919	0.845	1
7	Sandhurst Road—Wari Bunder	April 1920	1.937	1
8	Wari Bunder—Reay Road ..	April 1921	1.143	1
9	Reay Road—Tank Bunder ..	Oct. 1923	0.876	

" In order to avoid any delay and complication, I am instructed to request that the Corporation should record its approval or disapproval of each item in the schedule and communicate the same to us at an early date. Should the Municipal Corporation desire any further information on the fares set out in the schedule the Company will be glad to depute officers to discuss these, or any alternative proposals, at any time, which may be appointed."

The matter was referred by the Corporation to the Tramways Committee. The latter referred it to a Sub-Committee. The recommendations of the Sub-Committee and the Committee are given in the following report of proceedings dated 14th March 1927 of the Tramways Committee:—

" 3. This Sub-Committee reported that they first examined the practicability of a zone system for the whole Island. It was found that there are special difficulties militating against the adoption of the zone system because it involves the fixing of arbitrary lines operating to the disadvantage of passengers entering the cars near the lines ; the idea of a zone system therefore was not pursued. The Sub-Committee then examined the feasibility of fixing all fares on a mileage basis, and proposed a uniform fare of one anna for four miles, to include all existing and future extensions. The Company's Executive could not recommend their Board to consider a fare of more than three miles for one anna for the following reasons :—

- (1) Any scheme of this nature involves giving up the Company's right to a specific fare on extensions over and above the 1905 system.
- (2) The cost of carrying passengers 4 miles for one anna is greater than the revenue earned.
- (3) The Company would lose the half anna extra on the Gowalia Tank line.
- (4) Four miles for one anna besides causing the Company an immediate and permanent loss would leave no margin of safety for the future.

" 4. The Sub-Committee then examined the specific proposals submitted by the Tramways Company, but at this stage, Mr. T. K. Roddan, Executive Engineer, who was present informed them that the question of laying a tramway extension along Sydenham Avenue was urgent, as it was necessary to proceed with the asphaltting of the road. The Company had undertaken, if the Corporation accorded their sanction, to lay their tram lines along Sydenham Avenue from its junction with Bhendi Bazar to the junction of Palton-Hornby Road as soon as the road is ready for them to do so, provided the Corporation approve of a fare of one anna being charged on this extension, the Company undertaking not to charge a higher fare to and from stations outside this extension than is then in force on the same journeys on the existing lines between Bhendi Bazar junction and Sassoon Dock.

" 5. When the schedule of fares on extensions was considered the Executive of the B. E. S. & T. Co., Ltd., agreed to recommend their Board, if the following fares on extensions were sanctioned :—

Lalbagh to Dadar	1.975	miles.	one anna.
Sandhurst Road to Wari Bunder	1.937	..	one anna.
Wari Bunder to Tank Bunder	2.110	..	one anna.

to forego their right, under the Deed of Concession, to specific fares on the following extensions, constructed since 1905 :—

Girgaum Portuguese Church to Byculla Bridge ;
Tardeo Terminus to Gilder Street ;
Opera House to Girgaum Portuguese Church ; and
Dhobi Talao to Flora Fountain ;

to be constructed—

Bhendy Bazar to Hornby Road *via* Sydenham Avenue.

" These extensions being considered as merged in the system as it existed in 1905, and the uniform fare of one anna, providing in the Deed of Concession, being made applicable thereto as on other parts of the 1905 system.

" The Sub-Committee approved of these proposals, and recommended them to the Committee for acceptance.

" 6. When this report was under discussion by the Committee, some of the Members asked the Tramways Executive, who were present, if they would consider and favourably recommend to their Board, a system based on a uniform fare of one anna for all direct tickets on the Company's system, including the present system and all future extensions, with an additional charge of half an anna for the issue of a transfer ticket. This proposal was accepted by the Company's Executive, who agreed to recommend it to their Board, if the Corporation adopted it.

" 7. The Committee discussed the whole question in all its aspects and they beg to recommend :—

- (1) That in supersession of the existing fare arrangements the Tramways Company be authorised to charge a uniform fare of one anna for a " direct " ticket on the whole of the Company's present system and on any future extensions that may be made ;
- (2) That a charge of an extra half-anna be made for the issue of a " transfer " tickets ;
- (3) That the existing Transfer Regulations be otherwise unchanged ;
- (4) That the Tramways Company be asked to give an undertaking that they would maintain their present tramway service intact and will not reduce any direct service running at present ; and
- (5) That the aforesaid arrangement be made permanent."

By Corporation Resolution No. 5396 of 18th August 1927, the above Report was referred back to the Tramways Committee.

Before coming to any decision in the matter, the Committee requested the Tramways Company to report the distance from Museum to (a) Opera House, (b) Grant Road Terminus, (c) Tardeo Terminus, (d) Parsi Statue, (e) Byculla Bridge, (f) Mazagon, and (g) Wari Bunder. The Company was also requested to report on the following suggestions :—

- (1) That an extra charge not exceeding half an anna be permitted over and above the usual one anna fare, over all tramway extensions of a mile and upwards made by the Tramways Company since 1905.
- (2) This provision under (1) however will not apply to the extension of "Chord Line" from Portuguese Church to Byculla Bridge."
- (3) That on further extensions made since 1927, the Tramways Company may charge half an anna extra for those extensions if they cover a distance of a mile or more.

These particulars were supplied by the General Manager in the following letter (No. 11408/27) addressed to the Municipal Secretary on 7th October 1927 :—

" With further reference to your letter No. 6345 of the 20th September 1927 we now have the honour to enclose two blue-prints of our Tracing No. B. 6662 (Amended) showing the distances between stations on the system. From these it will be seen that distances from Museum West are as follows —

To Opera House	2.5	miles.
Grant Road Terminus	3.1	"
Tardeo Terminus	3.5	"
Parsi Statue	3.1	"
Byculla Bridge	3.3	"
Mazagaon	3.6	"
Wari Bunder (Prince's Dock) ..	2.8	"

" *The proposals made in the extracts from Proceedings of the Tramways and Telephone Committee, attached to your letter under refy, that an extra charge not exceeding half an anna should be permitted over and above the usual one anna fare over all Tramway Extensions of a mile and upwards made since 1905 but that the extensions from Girgaum Portuguese Church via Charni, Foras and Clare Roads to Byculla Bridge should be specifically excluded from this additional sanction, is not acceptable to this Company because :*

- (a) The Lalbaug-Parel, the Parel-Dadar, and the Reay Road—Tank Bunder Extensions would not fall within its scope ;
- (b) It takes no cognisance of the length of extensions in excess of 1 mile.

" My Board is also unable to accept the other proposal that 'on further extensions made since 1927 (*i.e.*, on extensions made after the date of this letter) the Tramways Company may charge half an anna extra for those extensions if they cover a distance of a mile or more.'

" As regards the fares on future extensions, the Company is not agreeable to bind itself to any specific scale. Each individual case must be dealt with on its merits in accordance with the then prevailing circumstances.

"I am directed to point out that the Tramways and Telephone Committee are aware that a settlement of the fare question has been long delayed, and has now been pending for years. Though various modifications have from time to time been suggested in the different proposals which have been considered, no definite decision has been arrived at.

" I am therefore, directed to say that the matter cannot be allowed to be prolonged further. I am also to urge the Committee to recommend to the Corporation to reach a definite decision within reasonable time, by sanctioning specific fares to be charged on all extensions constructed from 1905 to date. Failing a very early final decision, this Company will be forced unwillingly to refer the whole question to arbitration."

The Committee reported on 20th December 1927 as follows :—

" It will be seen from this letter that the Company is unable to accept any of the above suggestions. They further point out that a settlement of the fare question has now been pending for years, and that though various modification have from time to time been suggested in the different proposals which have been considered, no definite decision has been arrived at. The Company therefore urge the Committee to recommend to the Corporation to reach a definite decision, within a reasonable time, by sanctioning specific fares to be charged on all the extensions constructed from 1905 to date and intimate that failing a very early final decision, they will be forced unwillingly to refer the whole question to arbitration.

" On receipt of this letter, the Committee considered the whole question again at their meetings held on the 17th November and 1st December 1927, in consultation with the Commissioner and they beg to recommend that in view of the fact that the Tramways Company desire to stand on their legal rights in the matter the only course in the opinion of the Committee which the Corporation should adopt is that they should also stand on their legal rights."

1928.

This Report came up before the Corporation on 19th March 1928. By their Resolution No. 14225, the Corporation referred it back for consideration to a Special Committee of 16 members named in the Resolution.

The Company viewing the dilatoriness of the Corporation addressed the following letter to the Municipal Secretary (No. 4895/28) on 19th April 1928 :—

" Since our letter to the Corporation No. 406/27 dated the 14th January 1927 considerable discussion has taken place with regard to the fares to be charged on those parts of the tramway system, which are not covered by the one anna fare, save and except the Gowalia Tank Extension. The Board feels that the time has arrived when the matter must be determined finally. By the direction of the Board I have therefore to request you to lay before the Municipal Corporation for their consideration and approval the following schedule of fares which the Company proposes to charge on those parts of its system, which are not covered by the one anna fare, save and except the Gowalia Tank Extension :—

No.	Extension.	Opened.	Length.	Fare proposed.
			Miles	Annas.
1	Lal Bag—Parel	Aug. 1907	0.987	1
2	Parel—Dadar	June 1917	0.988	
3	Girgaum Portuguese Church— Bycula Bridge	Nov. 1907	1.707	1
4	Tardeo Terminus—Gilder Street	Nov. 1908	0.306	$\frac{1}{2}$
5	Opera House—Girgaum Por- tuguese Church	Jan. 1919	0.170	$\frac{1}{2}$
6	Dhobi Talao—Flora Fountain	Nov. 1919	0.845	1
7	Sandhurst Road—Wari Bunder	April 1920	1.937	1
8	Wari Bunder—Reay Road ..	April 1921	1.143	1
9	Reay Road—Tank Bunder..	Oct. 1923	0.876	

" In order to avoid any delay and complication I am instructed to request that the Corporation will be pleased to record its approval or disapproval as to each item of the above schedule and communicate the same to us at an early date, not later than the end of June this year.

" The Company has given all the information that is necessary to enable the Corporation to come to a conclusion in these matters, but should any further information still be required, the Company would be glad to depute officers to furnish the same."

On 21st May 1928, the Special Committee while making their report gave a short history of the whole case and recommended as follows :—

" The Committee appointed by Corporation Resolution No. 14225, dated the 23rd March 1928, to consider and report on the Second Report, dated the 20th December 1927, of the Tramways and Telephone Committee, regarding the question of fares to be levied by the Tramways Company, beg to submit the following report.

"2. The question of tramway fares has been engaging the attention of the Corporation since January 1927. Since then various proposals have been formulated with a view to exploring all avenues of an amicable settlement, but they were all turned down for one reason or another. On the 14th of January 1927, the Tramways Company approached the Corporation requesting sanction to a schedule of fares which the Company proposed to charge on extensions constructed since the year 1905. The Tramways and Telephone Committee during their deliberations on this question considered the practicability of introducing a zone system for the whole Island but it was not found feasible as it involved the fixing of arbitrary lines operating to the disadvantage of passengers boarding cars near the lines. The method of fixing fares on a mileage basis of four miles for one anna had similarly to be left out of consideration as any scheme of this nature forfeited the Company's right to a specific fare on extensions over and above the 1905 system, the cost of carrying passengers four miles for an anna worked out to be greater than the revenue earned, the Company stood in danger of losing the half anna extra on the Gowalia Tank Lane, and because this method, besides putting the Company to an immediate and permanent loss, would leave no margin of safety for the future. Further discussions in the Tramways and Telephone Committee brought the question very near to a settlement when the Company expressed their willingness to charge one anna on extensions of about 2 miles in length and to forego their right for an additional fare on smaller extensions. The Committee however recommended the following proposals for the acceptance of the Corporation :—

- (1) That in supersession of the existing fare arrangements the Tramways Company be authorised to charge a uniform fare of one anna for a " Direct " ticket on the whole of the Company's present system and on any future extensions that may be made.
- (2) That a charge of an extra half anna be made for the issue of a " transfer " ticket.
- (3) That the existing Transfer Regulations be otherwise unchanged.
- (4) That the Tramways Company be asked to give an undertaking that they would maintain their present tramway service intact and will not reduce any direct service running at present, and
- (5) That the aforesaid arrangement be made permanent.

" This settlement appeared to the Corporation to be inequitable from the standpoint of the average passenger as people travelling on direct routes would benefit at the cost of those having to effect a transfer without any regard for the distance travelled, and the question was referred back to the Committee for re-consideration.

I requested you in that letter to lay before the Municipal Corporation for their consideration and approval a schedule of fares which the Company proposed to charge on those parts of its system which were not covered by the one anna fare except the Gowalia Tank Extension. I also requested the Corporation to record its approval or disapproval as to each of the items of the said schedule and to communicate their approval or disapproval to me at an early date not later than the end of June of this year.

" Prior to the date of this letter the Company placed before the Corporation all information which was necessary to enable the Corporation to come to a conclusion in these matters and several meetings have been held between the representatives where these questions have been discussed. Though the time limited in the said letter has expired long ago, the Corporation has failed to express its approval as to all or any of the items contained in the said schedule. Hereto annexed and marked A is a copy of the said letter for ready reference.

" The Company are unable to defer the settlement of these questions any longer and they must therefore have the matter decided otherwise than by the agreement which they were hoping would be arrived at.

" As you are well aware, by Clause 15 of the Deed of Concession the Company has authority to take tolls, fares and charges for the use of the tramway at rates to be fixed subject to the approval of the Corporation and in so far as regards passenger traffic over the lines comprised in the then existing tramways the fare should (subject as thereafter provided) be at an uniform rate of one anna from any one point to any other point.

" By Clause 25 of the said Deed of Concession if any doubt, difference or dispute should arise between the Corporation and the Company touching the construction of those presents or anything therein contained or touching or concerning any other matter or thing relating to those presents then and in every such case such doubt difference or dispute shall be referred to the arbitration of two independent persons one to be chosen by the Corporation and the other by the Company under the circumstances and subject to the conditions contained in that clause.

" The Company accordingly desire to submit to arbitration the question whether or not the rates contained in the schedule hereunder should be charged by the Company over the respective extensions mentioned therein or any of them and if not what other rate or rates should be charged on the said extensions or any of them.

" The Company hereby gives the Corporation notice that they have appointed Sir Chimanlal Setalvad to act as an arbitrator on behalf of the Company and they hereby call upon the Corporation to appoint an arbitrator on their behalf within six weeks from the receipt of this notice so that the matter may be determined without undue delay.

The Schedule.

No	Extension.	Opened	Length		Fare proposed
			Miles	Annas	
1	Lal Bag Parcel	Aug 1907	0 987	}	1
2	Parcel—Dadar..	June 1917	0 988		
3	Girgaum Portuguese Church —Byculla Bridge	Nov 1907	1 707		1
4	Tardeo Terminus—Gilder Street	Nov 1908	0 306		$\frac{1}{2}$
5	Opera House—Girgaum Por- tuguese Church	Jan 1919	0 170		$\frac{1}{2}$
6	Dhobi Talao—Lorv Mount an	Nov 1919	0 845		1
7	Sandhurst Road Wari Bunder	April 1920	1 937		1
8	Wari Bunder Reay Road	April 1921	1 143	}	1
9	Reay Road—Tank Bunder	Oct 1923	0 876		

The following letter (No 15896 28) was then addressed by the General Manager to the Municipal Secretary on 23rd November 1928 :—

“ On the 4th October 1928 I wrote to you stating that the Company desired to submit to arbitration the question whether or not the rates contained in the Schedule to that letter should be charged by the Company over the respective extensions mentioned therein or any of them and if not what other rate or rates should be charged on the said extensions or any of them. I also stated that the Company gave the Corporation notice that they had appointed Sir Chimanlal Setalvad to act as an Arbitrator on behalf of the Company and they called upon the Corporation to appoint an arbitrator in their behalf within six weeks from the receipt of my letter.

“ Six weeks have passed and the Company have received no reply to my letter of the 4th October nor have the Corporation appointed an Arbitrator on their behalf.

“ I hereby again place on record the appointment of Sir Chimanlal Setalvad to act as an Arbitrator on behalf of the Company to settle by arbitration the question whether or not the rates contained in the Schedule to my letter of the 4th October 1928 should be charged by the Company over the respective extensions mentioned therein or any of them and if not what other rates or rates should be charged on such extensions or any of them and the Company hereby require you within seven days from the service of this notice on you to appoint an arbitrator to act on behalf of the Corporation in the matter of the said disputes, failing which the said disputes will stand referred to the said Sir Chimanlal Setalvad alone as Sole Arbitrator.”

Meanwhile, the Case for Opinion of Counsel was prepared by the Municipal Commissioner and approved by the Law, Procedure and Elections Committee. The Joint Opinion of Sir J. B. Kanga and Mr. V. F. Taraporewalla of 23rd November 1928 was as follows :—

Opinion.

1. The real question here is whether there is a difference or dispute between the querists and the Tramways Co. as would fall under Clause 25 of the Deed of Concession. Under Clause 15(a) the Tramways Co. has authority *inter alia*, to take tolls, fares and charges for the use of the tramway at rates to be fixed subject to the approval of the querists. The fares are, therefore, to be fixed by the Tramways Co., but the fares so fixed must be approved by the querists. The fixing of the fares is thus to be the act of both the parties. If the querists refuse to approve any fares fixed by the Tramways Co. under the said Clause, the Tramways Co. can say 'the fares fixed by us are reasonable and your refusal to approve is unreasonable'. There would be a dispute or difference between the parties touching a matter or thing contained in the Deed of Concession and therefore within Clause 25. See *Re : Arbitration between Hohenzollern Action Gesellschaft and Contract Corporation* (1886) 54 L.T. 596

Even if the querists had an absolute discretion to refuse approval of any fares fixed by the Tramways Co., which, in our opinion, the querists have not under Clause 15(a) the exercise of such discretion could be disputed by the Tramways Co. on the ground that it was arbitrary and unreasonable. See the observations of their Lordships of the Privy Council in *Diwanchand v. Weld & Co.*, 28 Bom L.R. 1488 at p. 1496. "The respondents Counsel faced with this were, their Lordships felt, not far from suggesting that an absolute discretion, like that of the respondents in this matter, was the equivalent of a right to make a purely arbitrary demand. It is not so. A discretion although absolute it is none the less a discretion to be exercised with reference to the true position and with perhaps even greater sense of responsibility in that it is within limits final."

In our opinion, therefore, in view of the facts herein, the Tramways Co. are entitled to ask that the dispute between the parties as to the fares to be fixed under Clause 15 (a) should be referred to arbitration under Clause 25.

2. We have nothing to add.

The Company pursued the matter further and addressed the following letter (No. 15437/28) on 4th December 1928 to the Municipal Secretary :—

"I wrote to you on the 23rd November confirming the appointment of Sir Chimanlal Setalvad as an arbitrator on behalf of the the Company to settle by arbitration the question whether or not

the rates contained in the schedule to my letter of the 4th October 1928 should be charged by the Company over the respective extensions mentioned therein or any of them and if not what other rate or rates should be charged on such extensions or any of them and requiring you within seven days from the service of this notice on you to appoint an arbitrator to act on behalf of the Corporation in the matter of the said disputes failing which the said dispute would stand referred to the said Sir Chimanlal Setalvad alone as sole arbitrator

Seven days have passed since the service of this notice on you and no appointment of an arbitrator has been made. The Company have therefore appointed Sir Chimanlal Setalvad the sole arbitrator in the said reference and have called upon him to proceed with the said arbitration forthwith. Copy of our letter to Sir Chimanlal Setalvad is enclosed herewith.

The Municipal Secretary by his letter (No 803) of 4th December 1928 requested the Company, at the desire of the Corporation, to postpone for the time being its proposal for referring to arbitration the question of levying fares on certain Tramway Extensions until the Corporation had considered and finally disposed of Counsel's opinion with regard to the question of arbitration, which they had obtained.

To this, our reply was contained in the following letter (No 17197 28) forwarded by the General Manager to the Municipal Secretary on 18th December 1928

"Fares on Extensions without Prejudice"

I have the honour to acknowledge your letter No 803 of the 4th December 1928 requesting the Company to postpone for the present their proposal to refer to arbitration the question of levying fares on certain Tramway Extensions until the Corporation have considered and finally disposed of Counsel's opinion with regard to the question of arbitration already obtained by them.

The Corporation were by my letter No 13327 28 of the 4th October 1928 given six weeks time within which to appoint an arbitrator and only on their failing to do so within that time did I by my letter No 15896 28 of 23rd November 1928 confirm the appointment of Sir Chimanlal Setalvad as an arbitrator on behalf of the Company to settle by arbitration this dispute and require you within seven days from the service of that notice on you to appoint an arbitrator to act on behalf of the Corporation failing which the dispute would stand referred to Sir Chimanlal Setalvad as sole arbitrator.

No appointment having been made I by my letter No 16437 28 of the 4th December 1928 stated that as seven days had passed since the service of this notice on you and no appointment of an arbitrator had been made the Company has appointed Sir

Chimanlal Setalvad sole arbitrator and called on him to proceed with the arbitration forthwith.

“ The Company are now entitled to call upon Sir Chimanlal to proceed with the arbitration ; but I am instructed by the Board to inform you that they will not call upon Sir Chimanlal to do so until such time as the Corporation has been afforded reasonable opportunity of considering, and finally disposing of, Counsel's opinion.”

The matter finally came up before the Corporation on 20th December 1928 whereat by their Resolution No. 8830, they approved and adopted the report, dated the 21st May 1928, of the Tramways Committee.

1929.

On the 25th January 1929, the General Manager wrote to the Municipal Secretary that he was directed by the Board of the Company to accept in their entirety the proposals of the Municipal Corporation. He added that he was further desired to express the great satisfaction of the Board at the settlement of the matter in amicable negotiation with the Corporation, without invoking the assistance of any arbitral agency.

Though the Company was entitled to charge the fares sanctioned by the Corporation, in view of the depression of trade and considerable degree of unemployment, the Directors did not desire to add to the charges payable by the travelling public. They therefore decided not to exercise their aforesaid rights immediately. A Notice (which was notified to the Municipal Secretary) was accordingly given to the public on 23rd February 1929 maintaining until further notification the existing fares. The Directors in making this concession reserved to themselves the right to withdraw it at a fortnight's notice.

As regards the Gowalia Tank Extension, the revised fares agreed upon with the Municipal Corporation were introduced on and from 1st March 1929.

Experimental Half Anna Fares.

1932.

Purely as an experimental measure, all-day and restricted-hours half anna fares were introduced by the Company on the following sections of the Tramway System, for a period of three months, with effect from 1st August 1932. The Company reserved the right to suspend or cancel

these fares, without assigning any reason whatsoever, by giving 24 hours' notice to the public to be posted inside the tram cars. These half anna fares are not available on :—

- (1) Cocoanut Day.
- (2) Dusserah Holidays, and
- (3) Divali Holidays

Only direct tickets are issued under this scheme and they are not applicable to children.

A list of stations to and from which the tickets are available is given below.

Half Anna Fares are available throughout the day between any one of the following stages :—

Stage No		Stage No
28	Dadar Parel	27
27	Parel Lal Baug	26
26	Lal Baug Victoria Gardens	25
37	Tank Bunder Tram Terminus	
	Reay Road Stop	34
34	Reay Road Stop . . . Dockyard Road Stop	34A
18	Tardeo Tram Terminus . . . Foras Road Junction	17

Half Anna Fares are available throughout the day on Sundays and from first car to 8 a.m., 11 a.m. to 16 p.m., 20 p.m. to last car on week days between any one of the following stages :—

Stage No		Stage No
29	Flora Fountain Dhobi Talao	7
	(Via Esplanade Road only)	
5	Bori Bunder Crawford Market	6
5	Bori Bunder Chakla Street Junction	39
6	Crawford Market . . . Pydhowna	11
7	Dhobi Talao Thakurdwar	7A
7	Dhobi Talao Pydhowna	11
16	Grant Road Two Tanks	19
12	Null Bazar Old Parsi Statue	22
8	Carnac Bunder Weli Bunder Junction	9
30	Sandhurst Bridge . . . Round Temple	32

The reasons which led the Board to sanction the introduction of the above fares were as follows :—

As the Tramway Traffic had declined very considerably since May 14, 1932, the Acting General Manager, with a view to :—

- (a) Meeting Railway competition on parallel routes,
- (b) Feeding Railway centres, and
- (c) Serving the demand for 'short distance' traffic, submitted proposals for the experimental introduction of half anna fares :—
 - (1) Available during service hours on :
 - (a) parallel routes, and
 - (b) routes feeding Railway stations ;
 - (2) Available during slack hours on :
 - (c) certain Bazar sections

The proposals were put forward as an experimental measure for three months to :—

- (a) Assist in the relief of the present industrial depression, and
- (b) Meet the traffic demand

The experimental period was extended to 31st December 1932 and the following Half Anna stages were added :—

Dhobi Talao	to	Chukla Street
Noor Baug	to	Mazagaon
Bhendi Bazar	to	Warri Bunder
Bhendi Bazar	to	Chukla Street

The Company again decided to continue the experimental introduction of Half Anna Fares for a further period from 1st January 1933.

More Half Anna stages were introduced from 8th March 1936.

CHAPTER 12.

Traffic Re-organisation.

Sir Stanley Reed addressed the following letter dated the 6th March 1924 from London to Mr. Moberly requesting him to put it before the Board with his own remarks thereon :—

“ The refusal of the Municipality to increase our fares and rates for supply—a refusal which I think we must regard as permanent—throws us back on the development of our existing resources for the growth of our revenue. For all practical purposes these are confined to traffic and supply. What follows relates solely to traffic, and I will put certain issues on supply before the Board next mail.

“ Many Tramway Corporations in England and in America have been faced with the same difficulties as confront us, namely, an increase in operating charges without the possibility of increasing rates owing to competition. They have found it desirable to go down to bed rock in order to reduce operating charges, and under this policy they have found great advantages from getting an expert outside view of their operating system. Mr. Cooper has given me two conspicuous illustrations of this practice. The Americans think that they know all about trams and traffic, but the Chicago Tramway System invited the assistance of Mr. Dalrymple in overhauling their working arrangements, and the Toronto System have taken the services of Mr. Blain of the Underground and Omnibus Group !

“ We suggest to the Board that they shall follow this practice, and obtain the services of the best man available to inquire into our present operating system with a view to improvements and speeding up the service, economies in working, the introduction of first class fares, the simplification of the transfer system, and a general programme of extensions in the order in which they shall be followed.

“ Although the Board has wisely laid down the policy that they cannot go into a general system of extensions until fares are raised, nevertheless, rapid development of the northern part of the Island under improvement and development schemes and the approaching completion of the reclamation, will force upon the Company a certain development policy.

“ Mr. Cooper had some conversation with Mr. Blain, the right-hand man of Lord Ashfield in the Underground Combination, whose services have been specially directed to the organisation of the omnibus routes and the co-ordination of the omnibus, tramway and underground services. Mr. Blain having since been

appointed as *Chief Conservative Agent*, he may no longer be available. If he is not available he will, we are sure, assist Mr. Cooper to find the right man.

" I wish it to be clearly understood that this recommendation is in no way a criticism of the present traffic staff. We have very able and efficient officers who are entirely devoted to the interests of the Company. But they have grown up with the business of the Company, and by the nature of their work have not been able to keep in close contact with the very great developments in England and abroad. We think, therefore, that they would welcome the advice of a thoroughly competent expert with experience in other fields.

" What we suggest is that the Board should agree in principle to the engagement of such an expert. He will come to Bombay for part of the cold weather, if possible by the same boat as I travel by at the end of October. He will thoroughly examine in co-operation with our own officers the whole working of the traffic branch, and inquire into the field of expansion. He will then make his recommendations which will be considered by the Board with a view to laying down a definite policy, for say, the next five years.

" With regard to the time and cost, Mr. Blain being at the very head of his profession would have asked a fee of £ 1,000 plus travelling expenses and maintenance allowance. He thought that if all material he required were given to him in advance, he could complete his work in Bombay in about a month. If Mr. Blain is not available we could probably obtain through his assistance a really first class man for a fee of about £ 500 plus his travelling expenses and cost of living while in Bombay.

" We suggest, therefore, that the Board should consider this question and come to a decision now. If they agree that the engagement of such an expert is desirable we would ask them to cable to us through you to go ahead, and to fix the maximum fee, which we would put at about £ 500 plus travelling expenses and maintenance allowance. If, however, Mr. Blain is available we should very strongly advise the Board to incur the extra cost of his entertainment, because he is undoubtedly the greatest living authority on traffic and operating charges connected with tramways and omnibuses, with the additional advantage that he has a thorough knowledge of the co-ordination of tramway and omnibus services with electric railways, and we in Bombay shall soon be faced with the necessity of co-ordinating our system with the electrified G.I.P. and B.B. & C.I. Railways.

" It will be within the recollection of the Board that some three or four years ago they decided to bring out an expert of this character, but on the advice of Mr. Rimington it was postponed because he thought he would have the time to look into this himself. He was unable to do so through indisposition and pressing work, and the scheme therefore was dropped.

" Mr Cooper and I are both agreed in strongly commending to the Board the immediate entertainment of this idea, and if they approve we will carry through the necessary arrangements without delay and furnish you with a statement of the information which is required for the preliminary investigation

" If this course is approved, as Mr Lucas is now in England and does not leave until May, there will be time for him to get into close personal contact with whatever gentleman was selected."

While circularising the above letter amongst the Directors, the General Manager made the following preliminary remarks (No. 4112-124 of 24th March, 1924) :—

" 1. Sir Stanley has in the past discussed this question with me several times ; I then always maintained that local conditions prevailing here are so exceptional, that I was doubtful if we should obtain very great assistance from a man acquainted only with European and American conditions

" 2. Conditions however have changed so materially in the past few years, that I now feel entirely justified in endorsing fully the recommendations made jointly by Sir Stanley and Mr Cooper to the effect that an expert outside view be obtained, on the grounds that principles are similar the world over, though their application must vary.

" 3. I venture to think that Sir Stanley and Mr Cooper are somewhat far ahead of requirements in regard to a policy of development. We have plans ready, but physical obstructions still exist, and are likely to exist for many years to come, as far as I can see. I am very doubtful if any large extension of our tramway system will be feasible on this account in the fairly near future. However to be prepared cannot but be good.

" 4. Sir Stanley asked for cabled instructions, stating whether the Board authorise him to go ahead, and quoting the total cost the Board are prepared to sanction.

" It is advisable that this should be settled at an early date as preliminary conversations between the gentleman selected, and Mr Lucas (who is due back here on 23rd May) are obviously desirable.

" 5. I beg to recommend therefore —

- (a) that the Board authorise Sir Stanley to go ahead on the lines indicated in his letter ;
- (b) that Mr. Blain be retained if feasible ;
- (c) that the Board sanctioned a total expenditure of say £ 1,000 plus travelling allowance and maintenance in this connection, leaving details for Sir Stanley to arrange "

The matter was considered by the Board and they authorised Sir Stanley Reed to make all necessary arrangements with a view to obtaining the services of Mr. Blain at a fee of £1,000 plus maintenance and travelling allowance, or alternatively of another gentleman at a fee not exceeding £1,000 inclusive (26-3-1924).

Mr. Cooper got into touch with Mr. Blain immediately the Board's decision was cabled to him, but as Mr. Blain was appointed principal agent to the Unionist Party, pressure of his new duties made it impossible for him to consider our offer. Mr. James Dalrymple, General Manager of the Glasgow Corporation Tramways, was then appointed and he accepted the terms of the Board to visit Bombay and to report upon the Tramway System with his recommendations as to modification of existing methods and lines of development for the future. Mr. and Mrs. Dalrymple left London on 31st October, 1924, and landed at Bombay on 21st November. He spent 30 days in India and sailed for home on 27th December, 1924.

The Directors desired Mr. Dalrymple to express his opinion at the close of his investigation of the system, on the following general heads :—

- (a) The general organisation of the Traffic Branch, with any suggestions for the more efficient, economical and profitable working of the traffic system, and for stimulating receipts.
- (b) The distribution of duties amongst the personnel of the Traffic Department.
- (c) The system of inspection, together with suggestions of the part which the senior traffic staff (other than the Traffic Manager) should take therein ; the value of the Special Inspections, and a recommendation as to whether the system is worth maintaining or extending.
- (d) The quality and discipline of the operating staff, and its relative efficiency as compared with systems in other parts of the world.
- (e) The possibility of economy in the number of operatives, with special reference to the desirability of issuing fares outside the cars, or on the platforms of the cars.
- (f) The practicability of more closely adjusting the service of cars to the actual state of traffic, with special reference to such a decline in traffic as was experienced in 1924.
- (g) The system of transfer tickets, with any proposals for greater simplification.
- (h) The actual running of the cars, with any proposals for expediting the services and increasing the duty rendered by the cars.

- (i) The quality of the cars in service, with an examination of the type of car which, in your opinion, is best suited to Bombay conditions.
- (j) The ratio of fares charged in Bombay, with any comparison which may be practicable with the traffic of other tramway systems.
- (k) The desirability or otherwise of introducing first class cars as an experimental measure on the Girgaum section, in the terms of the Corporation's resolution sanctioning the first class cars.
- (l) The value of the railless trolley, with the practicability of its use in the outer zones not covered by the tramway system.
- (m) Further, to advise generally on any features of the working of the Tramways, which may come under your observation.

and if time allows:—

- (n) The commercial possibility of introducing motor omnibuses in Bombay either on routes covered by the tramway system or on alternative routes.

Mr. Dalrymple submitted his Report on the 14th January, 1925.

The following Note, dated 24th February, 1925, prepared by Sir Stanley Reed for the Board of Directors, gives the main points of the Dalrymple Report and the action proposed to be taken thereon:—

1. *Speed*.—The basic recommendation in the report deals with speed. On this point Mr. Dalrymple says:—

“ From observations of the traffic and the number of cars on each route, I am satisfied that the citizens of Bombay have a good tramway service. The only fault I can find in regard to the service is that it is too slow. From the time a car leaves the depot until it returns the average speed per hour is only 4.8 miles and the average speed from terminus to terminus is only 5.75 per hour. This speed might have been reasonable in the old horse-car days but it is much too slow for an electric car.

“ The time has now arrived when the motorman should be enabled to attain a greater maximum speed so that the average may be increased by at least one mile per hour. This would relieve quite a number of cars and the saving in the wages of conductors and drivers would be about one lakh of rupees.

“ The citizens of Bombay will not submit much longer to the present average speed, and I think in view of the improvements that are being carried out by the City and also in view of the electrification of the railways that the Company should immediately take steps to have the speed of the cars increased. The drivers will, I have no doubt, rise to the occasion and possibly it will soon be found that even more than a mile per hour can be added.

"The Traffic Manager has worked out for me a statement showing the saving in rolling stock effected by increasing the speed by one mile per hour at 28 cars."

We are in entire agreement with these recommendations.

The Members of the Board will recollect the circumstances in which the speed of cars became stabilised at this very low figure. It is less than the speed of the old horse cars, and below the average of 7 miles per hour which was attained in the early days of electrification; it works out between depots at little more than brisk walking speed, and must be the slowest in the world for electric trams.

In 1909 the Police complained that the speed of the cars was excessive. The Municipal Corporation took up the matter, and the Electrical Engineer to Government complained that our brakes were not sufficiently effective. In order to avoid the expense of better brakes the Company agreed to lock the controllers so that the maximum speed should not exceed twelve miles an hour. But this was meant to be a temporary expedient. In sanctioning this arrangement the Municipal Commissioner reported to the Municipal Corporation:—

"There is no doubt that, especially when the question of suburban extension is taken up, it will be desirable to require a higher rate of speed."

The conditions for a higher rate of speed are now much more favourable. The road surfaces have been so vastly improved that the bullock carts no longer crowd on the tramway track; many wider streets and other road improvements have been opened up; and new wide roads have been and are being constructed. Other considerations make this question imperative. They may be summarised as follows:—

(a) Wages have enormously increased. They have doubled between 1913 and 1924, and for this doubled wages bill we are not receiving any better return from the operating staff. Whilst the higher scale of taxation is a contributory factor, this increase of wages is chiefly responsible for the rise in our ratio of *cost to gross revenue* from 48 to 67 per cent. in this period, and for the falling off in the return from the traction branch from 9.1 per cent. to 4 per cent. in 1923. According to Mr. Dalrymple's estimate we should save in wages alone a lakh of rupees annually by increasing our speed by one mile per hour; it is not easy to estimate the total saving, but it cannot be less than Rs. 5,000 per car per annum, which would give us an annual saving of Rs. 1,40,000 per annum.

(b) A quicker service would be more popular. A common request from passengers is for a quicker service.

(c) We are now faced with the competition of the electrified system on the Harbour Branch Line, and electrification is to be rapidly extended to the G. I. P. and B. B. & C. I. suburban services.

(d) We may at any time be faced with the competition of motor buses.

A beginning has been made with a service from Churchgate Station to Ballard Pier. Although we doubt if a motor omnibus service can ever pay in Bombay, yet the Company will lose even if others do not profit.

The only safeguard against competition is a *quicker service*.

It is difficult, in non-technical language, to convey to the Directors the problems which are involved in an increased speed. With our controllers locked, as now, the maximum speed is twelve miles per hour, and with the frequent stopping places that maximum is rarely attained. If the controllers are unlocked, we must run in "full parallel" and that is with a maximum speed of 18 miles an hour. Experience shows that on open lines our drivers can run in full parallel, and as an experimental measure they have been running in this way for a few weeks on the Colaba-Museum section. But experience also shows that drivers cannot be trusted not to run in full parallel, through the congested parts of the city. If therefore speed is to be increased we must have authority from the Municipality to run in "full parallel" and that opens up the question of brakes.

This question of brakes has been under constant consideration. If we run in "full parallel" we must fit new brakes, and, or sand gear. New brakes have been budgeted for in capital commitments several times recently, but they have been cut out on the grounds that no funds were available.

Careful tests are now being made with sand gear, and the magnetic track brake, and if we are satisfied that an application can be made to the Municipality for permission to run in "full parallel" with reasonable assurance that there will not be an increase in the number of accidents, then we shall approach the Board for permission to make the necessary application.

2. *Time-table and Lie-over.*—Closely linked with this question of increased speed is the establishment of a time-table and a reduction in the lie-over time. On these points Mr. Dalrymple says :—

“ Another matter in regard to the service of cars which might be referred to is the absence of a time-table. I am strongly of opinion that an effort should be made to maintain the service on a time-table. There will be difficulties but these have got to be overcome.

“ I noticed that the conductors and drivers have a considerable lie-over at each terminus I think it might be quite possible to arrange for a shorter lie-over. Every effort should be made to get more mileage out of both the staff and the rolling-stock. An average of 75 miles per car per day is a very low mileage. Even if this figure were increased by a small percentage it would mean a considerable annual saving.”

Running to a headway—the present system—as against to a time-table is more popular with passengers, because it obviates the not infrequent necessity of reversing cars short of their destination, and with the staff, because it prevents split duties. Such “ split duties ” are extremely unpopular with our drivers and conductors, because they entail a few hours work in the morning, and a further few hours in the evening with a long stand-off in between. Possibly a man may finish late at night, and have to take his first duty very early in the morning. In one of our recent strikes this system was made a great point by the men, who were promised such duties should be kept down to an absolute minimum. But it is more expensive, and in view of our very high wages bill, with its effects on the returns from the Traction Branch, no avenue to economy can be neglected. Moreover our track and overhead equipment have been markedly improved and delays from this cause are infrequent. Street obstructions, for the reasons given above, are rarer. We believe in all these matters in hastening slowly, and trying to carry the public and the staff with us. We recognise that the introduction of a time-table, with the not infrequent reversing of cars, may not be popular with the public, and that the staff will not like the split duties which are involved in time-table running. As questions of policy are involved, we therefore request the opinion of the Board.

If the Board approves, we will introduce a time-table as an experimental measure on a route selected by the Traffic

Manager, and thoroughly try it out under the personal supervision of the Traffic Superintendent. This experiment will give us the data for the formulation of a permanent policy in this respect.

3. *Conductors and Drivers.*—Mr. Dalrymple was painfully impressed, as every other first visitor to the East must be, with the number of conductors required to do a given amount of work, and with the large number of men we have to keep on the books in proportion to the staff necessary actually to run the cars. But this is a condition with which everyone acquainted with Indian conditions is familiar. Our staff generally work three weeks in the month ; they do not hesitate to throw up their jobs if called up-country, or because there is sickness in the family ; and many leave because they find the work irksome.

These conditions point, if anywhere, to the fact that our men are overpaid. Certainly, if the various privileges they enjoy are taken into account, they are the best paid men in Bombay for the work they do. A case might be made out for a reduction in wages. We do not believe that would pay the Company in regard to the labour troubles which would certainly ensue. We believe in paying the men well, but in exacting a higher return through increasing the speed and if possible in reducing the lie-off time. Whilst we cannot hold out any great hope in a reduction in the fluidity of our labour, we believe the time is opportune for a still further tightening up of the discipline and efficiency of the staff. For the first time for many years there is a surplus of labour in Bombay. We are reducing the personnel rather than taking on new men.

4. *Organisation and Outdoor Staff.*—On the subject of organisation the special point to note is the suggestion with regard to supervision and inspection.

Dealing with the outdoor staff, Mr. Dalrymple says :—

“ I was very much impressed with the number of men required to supervise the conductors and drivers while on the cars (353). You will understand my astonishment at the above figures when I give you the corresponding staff in Glasgow, a tramway system which is much larger than in Bombay (190).”

The question of the outdoor staff is one which has been a constant pre-occupation.

We are not satisfied with the general calibre of the inspecting staff. Some are most efficient but others are very much the reverse. Educated men are difficult to get and have not been found very useful when engaged.

It was in order to remedy the inefficiency of the inspecting staff that the Special Inspections, under the Traffic Superintendent and the Traffic Assistant Superintendents, were *instituted*. That inspection has been useful in tightening up discipline and generally improving the work of the conductors. But it is no longer necessary to employ highly-salaried officers for this purpose, and moreover if the service is to be speeded up they will be required for other purposes.

It is therefore proposed, subject to the sanction of the Board, that in each of the two districts into which the system is divided, under an Assistant Traffic Superintendent, there shall be a small staff of Special Inspectors, drawn from the existing cadre, whose sole business it will be to carry on, throughout the working day, the Special Inspections now carried on by the officers. The number of Inspectors has been reduced since the figures were given to Mr. Dalrymple, and every advantage will be taken of the present glut of labour to replace the less efficient by new men, either recruited directly or selected from the staff.

With regard to the work of the senior Traffic staff, other than the Traffic Manager, Mr. Dalrymple says :—

“The Traffic Manager has generally in the larger undertakings a chief assistant whose duties are for the most part on the line. This assistant has generally to spend some time in the office each morning going over the reports from the outside staff for the previous day. For the greater part of the day the Traffic Manager should have no one in the office but his clerical staff.”

In the Company's organisation the Traffic Manager has a Traffic Superintendent and two Assistant Traffic Superintendents. We are agreed that their duties should be for the most part on the line. Steps will be taken to relieve them so far as possible from office duty, so that they shall be free to work on the line, improving the discipline, speeding up the running and generally in getting more service from the conductors and drivers and the rolling-stock.

The chief essential for efficient working is constant and vigilant supervision by the Superior officers. To effect this it is essential that they should be on the line for the main portion of their working hours, and that they should travel in the tram-cars as much as possible. It is only in this way that they can get in real touch with the staff and the passengers, and realise the difficulties of the staff and the requirements of the passengers. Too much importance cannot be attached to this subject, though it is only right to inform the Board that these officers now spend from 3 to 4 hours daily on the line, as against 2 hours recommended by the late Managing Director.

5. *Uniforms.*—Mr. Dalrymple says :—

“ I believe a smart uniform has a good effect on the staff and also on the conduct of the passengers. The starter should be very particular in seeing that no man is allowed to take up his car unless his uniform is in good order and properly worn. It soon becomes apparent when there is any slackness in this respect.”

We agree. The increased cost of uniforms to the Company is not reflected in the better appearance of the men. This question is under investigation. We believe that by buying the cloth in bulk ourselves direct from the mills, and in securing a good quality which shall be made up by contract and issuing new uniforms less frequently we can secure a smarter appearance at a saving of cost. The Traffic Manager is working out a more suitable type of uniform, and when the inquiries are complete an estimate of the expense in comparison with the present cost will be laid before the Board.

6. *Appearance of Cars.*—Mr. Dalrymple remarks :—

“ Some tramway authorities do not pay much attention to the question of paint, being of opinion that paint is not a revenue-producing article. I hold entirely the opposite opinion. The cars are quite substantially built, but they do not look like the rolling-stock of a successful concern. They are not bright enough. They are insufficiently inviting. I am quite satisfied that if you used a little more paint and varnish you would draw more revenue without any additional expenditure.”

We are in entire agreement with this recommendation. The aluminium paint used on our cars has advantages, and was only adopted after many other varieties and colours had been tried. It is inexpensive and easily handled; moreover Mr. Dalrymple did not see it under fair conditions, because

with a view to economy the overhaul programme has been cut down. But it has disadvantages. It wears badly ; it cannot be cleaned ; and it gives a dull interior. It does not appear to be up to pre-war standard.

We are now experimenting with a more attractive method of painting inside and out, and with better lighting. As soon as the experimental car is ready, it will be brought to Colaba for inspection by the Board on a Board day, and if the financial prospect is economical, we shall, with the sanction of the Board, proceed to the gradual repainting of the stock a more attractive colour.

The other points raised by Mr. Dalrymple with regard to the cleaning of cars, the maintenance of car equipment, and the closing of the Colaba Workshop are technical. These points are being investigated by the General Manager.

7. *Fares and Transfers*.—On this subject Mr. Dalrymple remarks :—

“ I do not know of any other Tramway Company that has come under such an onerous obligation as is contained in your Deed of Concession, *viz*, the fare shall be at a uniform rate of one anna from any one point to any other point. . . . This concession on the part of the Company has made Bombay, as far as the tramways are concerned, a one anna city.”

This expression of opinion will be brought before the Arbitrators in the cases which are pending.

Later Mr. Dalrymple points to the simplicity in working from a uniform fare, and recommends a uniform fare of one anna over the whole system, should the Municipality be prepared to meet the Company in a reasonable way in order to settle the fare question.

We are of opinion that the only concession by the Municipality which would justify the adoption of a uniform fare of one anna would be the complete abolition of transfers, and as that is not probable, we are not in favour of the Company sacrificing the revenue which it obtains from the higher fares.

We are not in favour of the “ Pay-as-you-enter car ” as we do not think it is applicable to Bombay conditions.

On the subject of first-class cars Mr. Dalrymple writes :—

“ There is no doubt that many who do not use the cars at present would use them if more suitable accommodation was provided. The Company should make provision for these citizens at a fare double the ordinary fare. It would be necessary to give a first-class service equal to the ordinary service so that this service would require to be given by setting aside a portion of the car for those paying double fare.”

As the Directors are aware, this question of a first-class service at double fares has been constantly before the Company, and the Municipal Corporation has sanctioned it on the basis of a 50% increase in fares. Later it may be desirable to make the experiment. But we do not think that a time of acute trade depression like the present, when our ordinary traffic is falling off at the rate of a thousand rupees a day, is a favourable opportunity. The matter will be kept in mind and raised afresh when the conditions are more favourable.

8. *Extensions*.—Under the general head of development, Mr. Dalrymple reports as follows :—

“ In considering the suggested extensions, the Directors will require to take into account the very large capital cost of laying a new tramway. Very few tramway undertakings can now afford to expend the necessary capital. Indeed, quite a large number are seriously considering the question as to whether it is wise to expend money in renewing a worn out track. Where a proposed extension is short, and is simply a lengthening of an existing route, I should say by all means lay a tramway line, but where transport facilities are required along a new road which is independent of the present tramway system, I would strongly advise the Directors to look carefully into other forms of traction. The likelihood is that on these tramway extensions the revenue per car mile will not be so high as in the centre of the system. Great care must therefore be taken before deciding to expend additional capital on tramway extensions.

“ In considering the question of providing transport facilities to new districts the Directors should inquire fully into the possibilities of the Trackless Trolley System. I am quite satisfied that for separate and independent routes of some length this system would suit Bombay admirably.”

We are in entire agreement with this opinion. Careful investigation shows that the only tramway extension which is likely to secure a fair return on the capital outlay is that at DeLisle Road. As soon as the overbridge under construction is completed this project will be submitted to the Board. The Company is under a moral obligation to provide transport

facilities from Dadar to King's Circle at sometime or other ; but here we propose an experimental trackless trolley service. Thereafter we can discern no extension of the tramways which would pay the Company, even if the fares were readjusted over the whole system.

The advantages of the trackless trolley over the tramway are many. There is no permanent way to construct and maintain. A trackless trolley is really a motor omnibus, running over the ordinary road, drawing its power from an overhead wire just as our cars do, and so flexible that it runs in and out of the traffic. Almost every technical paper contains reports of the extended use of this system, which has been adopted in several cities even to the extent of taking up a tramway track in order to avoid the heavy expense of replacement. Its disadvantages are that the units are small at present, each single deck trolley bus carrying 32 passengers as a maximum, and therefore it is only suited to areas of light traffic. In Bombay the public would have to be educated to its use. We think that the trackless trolley is suited to serve the northern part of the Island, from the future King's Circle and DeLisle Road termini, the Vellard and the Worli Estate, Lamington Road and the whole of the Reclamation south of the Museum. If at any time the traffic grows to such an extent as to justify the laying of a tramway the overhead equipment can be adapted to this purpose.

We therefore propose, subject to the sanction of the Board, that when Sir Stanley Reed is in England he shall, with the Consulting Engineer, go fully into this question and submit a detailed report thereon. If this is favourable, then a suitable route shall be selected for experimental purposes and the trackless trolley tried out and under Bombay conditions.

In due course, action on Mr. Dalrymple's suggestions was taken and the results obtained thereby are summarised below :—

1. *Speed*: Since the investigations made by Mr. Dalrymple in 1924 magnetic track brakes have been fitted to service cars and services have been running in full parallel, with the following exceptions :—

(a) All Bazar areas.

(b) Service No. 12, Jacob Circle—C. P. Tank.

The result has been that our average speed from depot to depot is at present 6.5 miles, and from terminus to terminus 6.67 miles including lie-over and 7.7 miles excluding lie-over. It is impossible to accelerate the C. P. Tank—Jacob Circle service, as the whole route is too congested for cars to run at a higher speed.

With the acceleration of the tramway services, we have been able to reduce the number of cars. In 1923, 237 cars ran 541,000 miles monthly at an average of 76 miles per car per day as against 178 cars running 478,000 miles at an average of 90 miles per car per day in 1935. This great reduction cannot solely be attributed to speeding up only; it has also a bearing on the decreased traffic offering. Further three extensions to the tramway system have been inaugurated since 1924, *viz.*, Gowalia Tank, Mohammedali Road and King's Circle extensions, which have also entailed the necessity of running more cars.

A few cars are fitted with air brakes.

2. *Time-table running*: All services are running to time schedule at present.

3. *Conductors & Drivers*: Men are at present very cautious in seeing that they retain their jobs, as they are fully cognizant of the cheap labour conditions now obtaining in the City and well realize the difficulty, if not the impossibility, of securing employment in other directions. Consequently, they are far more amenable to discipline. Many of the cases of resignation are on account of heavy debts.

Reduction in wages: Although no direct reduction in their wages has been made, a new grading has been introduced from 1st January 1934 whereby the period of reaching the maximum has been extended from 3 to 10 years, and new men are not paid the Rs. 5 bonus for attendance.

4. *Special Inspectors*: There is a small staff of special inspectors whose sole business is to perform surprise checking throughout the line. Besides, the Traffic Officers with the assistance of this special batch are also conducting special checking. This inspection has been very useful in tightening up discipline and generally improving the work of conductors.

Passengers too are on the alert and the number of cases at attempting to avoid payment of tram fares has been considerably reduced.

5. *Uniforms* : Our policy at present is to purchase by tender, cloth in bulk directly from merchants, and issue same to tailors, as men become due for their supply of uniforms.

6. *Appearance of cars* : The aluminium paint which was used formerly for the cars is replaced by chocolate and maroon colours. As cars are reconditioned the post office red colour is replacing the maroon. At the same time, we are alive to the tastes of the travelling public and are anxious to keep abreast of the times. With these as our aim, several improvements have been made in reconditioned cars, such as better lighting and more comfortable seats.

Workshop at Colaba : The subsidiary workshops which were maintained at Colaba to tackle minor defects were abolished and transferred to Kingsway, as was suggested.

7. *First-class cars* : The question of equipping and maintaining first-class cars is expensive, and as the Municipality will not sanction the levy of an additional fare sufficient to meet this additional expense, this suggestion has been shelved. Further, we are not optimistic of the number of passengers availing of this facility, and it is quite possible that cars will always run with the first-class seats vacant, much to the inconvenience and annoyance of the ordinary fare paying passengers, who is our mainstay.

8. *Extensions* : The bus services provide the best means of giving data for extensions to the tramway service. This suggestion of running bus services is being experimented on several routes where we are requested to lay tram tracks, and the results have saved the Company from laying tracks in unremunerative localities.

The question of running trackless trolleys has been constantly engaging our attention, but due to various reasons, technical and otherwise, it has not been possible to introduce this type of traction in Bombay.

CHAPTER 13.

Railless Electric Traction.

1913-1923.

The question of introducing a railless electric traction service in Bombay engaged the attention of Mr. Rimington so far back as 1913. He was not only in favour of adopting railless traction to passenger traffic on certain routes, but was also in favour of applying the service for goods transportation also. The outbreak of the war, however, put an end to all investigations in the matter.

Mr. Rimington took up the matter again in 1919 and after investigations which lasted till 1923, it was thought that there was no opening for electric vehicles in Bombay at the time owing to the financial situation.

1925.

At the request of Sir Stanley Reed, Mr. Lucas, the Traffic Manager, prepared the following Note on the costs of running trackless trolley from Dadar to King's Circle (23-2-25) :—

“ Length of route : Round trip 1.81 miles.
Time for journey : At 15 miles an hour, 8 minutes (2 stops)
Headway : 6 minutes busy hours ; 12 minutes slack hours
No. of cars required : 2 busy hours, 1 slack hours.
Lie-over : 4 minutes, 4 minutes.
Mileage : 10 trips an hour from 8/12, 4/8 = 80 trips.
5 do. 6/8, 12/4, 8/12 = 50 trips.

130 trips.

130 trips $\times$ 1.81 = 235.30 miles per day.

Cost per mile : 16 annas including depreciation.

Cost per day : 235.30 miles $\times$ 16 = Rs. 235.

Revenue per mile : Presuming cars run half filled on average
we shall get 260 trips $\times$ 16 passengers = 4,160 passengers.
At $\frac{1}{2}$ anna each Rs. 130 per day against Rs. 235 expenses

Approximate loss Rs. 100 per day *plus* interest on Capital Expenditure.

If the cost per mile comes to 12 annas only, the cost per day would be Rs. 176 a loss of Rs. 46 per day.”

Sir Stanley Reed's remarks on this Note are given below :—

" I am not in favour to experimenting with the electric bus at this stage. The figures from Lancaster are unconvincing. The mileage is low, 57 per day ; the loss is heavy, 3.31 per bus mile ; the batteries used have not been tested under service conditions in Bombay ; and the operating costs are fractionally higher than trolley buses.

" The strongest evidence in favour of the trolley bus is Shanghai. After eight years' experience, that very successful concern has entered into an arrangement with the local Council, under which it schedules an extension of its trackless trolley service by 18 miles.

" Whilst therefore we should investigate further the advantages of the electric bus as a feeder, I cannot advise that we should adopt it now.

" As for the first trackless trolley route, I favour the principle laid down by the Traffic Manager, namely, that the experimental service should be linked up with one of our depots. That narrows the field of selection down to three, Colaba, Victoria Road, King's Circle.

" The objection to Colaba, and it is a serious one, is that it would run in competition with the existing trams, and it is one for which no one has asked.

" To my mind the selection lies between King's Circle and Victoria Road.

" I favour King's Circle, for the following reasons :—

" It embodies an extension for which the Municipality has asked.

" It opens out an area destitute of transport, and therefore serves a great public convenience.

" It is good open country, in immediate proximity to Kingsway and therefore specially suitable for experimental and training purposes.

" I therefore favour applying for an experimental service from the present terminus at Dadar for a couple of miles north, as near Sion Station as we can go for an anna.

" But as between Sion and Victoria Road I have no special predelection."

In view of the above remarks of Sir Stanley Reed, the General Manager applied to the Municipal Corporation on the 25th March 1925 for permission to open an experimental trackless trolley service, the route suggested being from the present tramway terminus at Dadar to and round King's Circle, a

length of 0.85 mile. In this connection Mr. Moberly wrote to the Municipal Commissioner as follows :—

“ I have the honour, under instructions from my Board of Directors, to lay the following proposal before the Municipal Corporation for consideration.

“ This Company has been pressed by the Municipal Corporation to make a number of extensions to its tramways system, and in particular the extension from the present terminus at Dadar to King's Circle. In view of the generally unremunerative character of the tramway business, owing to the high cost of constructing the track and overhead and other equipment, and to the rise in all operating charges, the Company has not felt in a position to construct extensions which, there is every reason to believe, would never be commercially profitable.

“ The Company is however fully alive to its responsibilities as a public utility corporation, and with a view to bringing its system into line with the best modern practice recently engaged Mr. James Dalrymple, General Manager of the Glasgow Corporation Tramways, one of the largest and most successful municipal systems in the world, to advise on operation and development. Mr. Dalrymple, after visiting Bombay and studying local conditions, has submitted a report wherein dealing with development he remarks : --

‘ In considering the suggested extensions, the Directors will require to take into account the very large capital cost of laying a new tramway. Very few tramway undertakings can now afford to expend the necessary capital. Indeed, quite a number are seriously considering the question as to whether it is wise to expend money in renewing worn-out track. Where a proposed extension is short and is simply the lengthening of an existing route I should say by all means lay a tramway line, but where transport facilities are required along a new road or on an existing road which is independent of the existing tramway system, I would strongly advise the Directors to look carefully into other forms of traction. The likelihood is that on these tramway extensions the revenue per car mile will not be so high as in the centre of the system. It may not even reach the average over the whole system. Great care must therefore be taken before deciding to expend the additional capital on tramway extensions ’

‘ In considering the question of providing transport facilities to new districts your Directors should enquire fully into the possibilities of the Trackless Trolley System. I am quite satisfied that for separate and independent routes of some length this system would suit Bombay admirably.’

“ A trackless trolley is an electrical motor omnibus, drawing its power from overhead wires, just as do electric trams. It does not run on rails, but on the ordinary road surface, and can easily be steered in and out of traffic. Such omnibuses are either single-deck or double-deck, but it is the intention of the Company, so

far as it is at present advised, to concentrate on single-deck omnibuses, each with a seating capacity of approximately thirty-two.

" The trackless trolley system has made marked progress in recent years. It has clear advantages over the tramway where the traffic is not sufficiently heavy to bear the cost of constructing an expensive track. These advantages are :—

- (a) The saving in the cost of the permanent way, and consequently the ability to serve areas which would otherwise be neglected until they had reached a stage justifying the provision of tramways.
- (b) Flexibility, namely, the ability to thread in and out of other traffic and consequently the avoidance of congestion and blocks.
- (c) Easy conversion into tramways when the growth of traffic justifies such an operation.

" The trackless trolley has now definitely passed out of the experimental stage. Almost every file of the technical news papers, which reaches India, records the extension of the system and in some cases, as at Chesterfield and Keighley, where the traffic is light, the actual removal of the permanent way of the tramways in order to substitute railless traction. The towns and cities where it is in most active operation are :—

Leeds.
Bradford.
Shanghai.
Bloemfontain.
Boksburg.
Birmingham.
Chesterfield.
Ipswich.
Keighley.
Singapore.

" One of the most important installations of trackless trolleys in extension of the existing tramway system is that of Shanghai, where the Tramway Company, after an experience extending over many years, has by agreement with the local authorities arranged to extend its trackless system by 18.28 miles.

" The Company's Engineers have been closely following these developments ; they are satisfied that the trackless trolley is adapted to Bombay conditions, and provides the most feasible means for furnishing cheap and rapid transport to those zones in the town and island which will not at present justify the construction of a costly tramway track.

" I am therefore directed to apply to the Municipal Corporation for permission to open an experimental trackless trolley services. The route which suggests itself as most suitable for this purpose is from the present tramway terminus at Dadar to and round King's

Circle. This particular route is selected because the Municipal Corporation is anxious that transport facilities from Dadar northwards shall be established at the earliest opportunity; proximity to the Company's workshops at Kingsway will facilitate attention to engineering details; the reservation on this road adapts it to the training of drivers before transferring them to more crowded routes; and the route is capable of extension towards Sion. The fare proposed is half an anna.

"Should this experimental service be satisfactory, then it is the intention of the Company to submit to the Municipal Corporation for consideration proposals for the extension of the trackless trolley system such as from King's Circle to Sion, DeLisle Road to Mahim; and from Mahalukshmi Station to Ferguson Road to serve the new chawl area at Worli."

It was intended to have the vehicles in all probability fitted with solid tyres.

In reply to one of the queries of the Municipal Executive Engineer as to whether the route along which the trolleys would run would be maintained by the Company, the General Manager wrote:—

"The general question as to maintenance of road surfaces appears to be one to be deferred until the result of the proposed experiments is known. Our present proposal is to construct the experimental section from our Dadar Terminus to King's Circle on the existing tramway reservation. I am prepared to undertake responsibility for the maintenance of the surface of that reservation during the trials. By the words 'maintenance of the surface of that reservation' we intended to refer only to that portion of the reservation on which the vehicles would run, namely, the portion that would ordinarily be occupied by the tram tracks and the two margins."

In this connection, the Memorandum prepared by Sir Stanley Reed and Mr. A. T. Cooper on the 13th August 1925 for the information of the Board will be read with interest. It is as follows:—

"TROLLEY 'BUSES'."

"In accordance with the decision of the Board, Sir Stanley Reed and Mr. A. T. Cooper have made full inquiries in England as to the working of trolley 'buses', supplementing the ordinary investigations by a visit to Keighley, where a complete installation is at work.

"As the result of these inquiries we make the following recommendations:—

"*Suitability of trolley 'buses*.—We selected Keighley as the theatre of our inquiries, because it was the first town in England to make a trial of the trolley 'bus (as far back as 1913), and has, after

a long experience of this type of vehicle, recently inaugurated one of the most complete installations in the Kingdom.

" Keighley is a small industrial town on the Yorkshire Moors. The tramway system was owned by the Municipality, and did not pay, the deficit steadily accumulating. The Municipality was faced by the necessity of relaying the track, not because it had worn-out, but because the road surface had subsided in many places and needed reconstruction. With this expenditure on a losing concern inevitable, the Municipality decided to scrap the tramways entirely, and to substitute trolley 'buses. This decision was reached after many years of experimenting, and after running trolley 'buses in competition with trams and motor 'buses. The Municipality is entirely satisfied with this method of transport, and if it had to take action anew, in the light of the experience gained, would unhesitatingly adopt trolley 'buses.

"Characteristics of the trolley 'bus.—We were deeply impressed with the running of the trolley 'buses in this town. They are very flexible, running in and out of the traffic with ease; they are fast, attaining a speed of 20 miles per hour on the level; the acceleration is rapid, full speed being attained in four seconds; they are easily controlled, emergency stops with foot and hand brakes combined being made in four feet from top speed; they are easily handled, drivers turning over from the trams to trolley 'buses with two hours training; they are so simple in maintenance that practically no skilled labour is required; and they are exceedingly silent in operation. The trolley 'bus is to the tram car or the motor 'bus in the matter of silence what the motor car is to the motor lorry. Although the double deck 'bus is used, and the conditions of service are exacting because the irregular tram track has not everywhere been removed, no accidents have occurred.

"Costs.—It is impossible to give accurate figures of running costs in Bombay, because they are governed by local conditions, but detailed statistics at Keighley, from the 1st April to the 18th June of the current year, give the actual operating costs—exclusive of interest charges—at 11.42 pence per 'bus mile. The revenue per 'bus mile for the same period was 13.32 pence. This was with power at a penny farthing a unit, drivers' wages averaging two pounds eighteen shillings, and conductors' wages two pounds twelve shillings and six pence per 48-hour week. These results were attained at a time of acute industrial depression, and with a limited rush-hour traffic. The only method of reaching a figure for Bombay is to take from the Company's statistics the working costs common to trams and trolley 'buses, and then to make a special calculation for the costs of trolley 'buses on the basis of a twenty year life for chassis, motor and body; 20,000 miles for a set of tyres; and the sum which would be paid to the Municipality for the user of the roads.

"Trolley 'Buses versus Trams and Motor 'Buses.—The experience of Keighley is of special value, because the trolley 'bus has been tried out in competition with trams and motor 'buses. The result

of these tests is the scrapping of the tramways. The Municipality still maintains a service of motor buses on long routes where overhead lines for trolley buses have not been laid owing to the absence of parliamentary powers, and in order to keep down competition from private owners. Its experience shows that whereas the cost of operating a petrol bus with 50 seats is sixteen pence per mile, a trolley bus with 60 seats costs a little less than twelve pence per mile. The motor bus can only live when operated without a conductor, the driver collecting the fares.

"Recommendations.—In these circumstances we have no hesitation in recommending the Company to experiment with the trolley bus, with a view to its adoption for all extensions if satisfactory terms can be made with the Municipality for the user of the roads. Mr. MacColl, formerly General Manager of the Shanghai and Singapore Tramways Companies, who has wide experience of trolley buses under Eastern conditions, asserts that wherever a tramway will pay a trolley bus will pay better. We could not suggest that any part of the existing tramway service should be scrapped for trolley buses, although in several towns in England—Birmingham, Chesterfield, Keighley and Darlington—this has been done. The only section of the Bombay Company's system where, when the existing track needs renewal, this might be considered, is the short line from Museum to Sassoon Dock, but we strongly recommend that not a mile of new tramway track should be constructed until the trolley bus has been thoroughly tried out under Bombay conditions, because we are convinced that for extensions the trolley bus possesses immense advantages.

"The Board has decided in principle on an experimental trolley bus service from the Dadar tram terminus to and round King's Circle, and has made application to the Municipality for the requisite permission. In the event of this permission being granted and reasonable terms being arranged for the user of the roads, we strongly recommend that this experimental service shall be launched without delay.

"Type of Bus.—There is nothing elaborate in the trolley bus. It consists of a standard type motor bus chassis, equipped with a traction motor, a simple control and standardised overhead equipment. There are only three really established makes on the market, the Straker-Clough, the 'Railless', and that of the Associated Equipment Company, who are now busy with a big order for Shanghai and Singapore. There is no material difference in price between the three, but we lay special stress on three points.

Simplicity.

Standardisation.

Uniformity.

"We consider it essential then that whatever type of vehicle is decided upon, one type only should be ordered. Our main reason for this recommendation is that nothing is more expensive under Eastern conditions than variety; it means separate sets of spares, switching drivers from a vehicle with one form of control to

another, and training the repair and cleaning staff in several types of vehicles instead of one. We strongly recommend that the best known type of trolley bus should be selected, and that only be used for the present.

Municipal Charges: The charge made by the Municipality for the user of the roads has a very important bearing on the economy of the trolley bus; we urge that every effort shall be made to secure a fair rate, and that if a fair rate is not offered, the experiment shall not be proceeded with, for it may fatally handicap the enterprise. In England trolley buses pay the recognised motor vehicle registration fee, and nothing else for the user of the roads. That fee is £ 70 per annum for a double deck bus, and £ 60 per annum for a single decker. It works out to something like three-farthings per bus mile. In Shanghai the statutory charge is two cents per bus mile, and that precedent has been followed at Singapore. Inasmuch as the Police will treat our trolley buses as motor lorries, we suggest that they should be charged at the motor lorry rate; if that is impracticable, then the Shanghai and Singapore precedents pressed on the Municipality."

Sanction to the Company's proposal was given by the Corporation on the 17th September 1925 in terms of the Commissioner's letter of 10th August 1925 to the Corporation which runs as follows :—

" I have the honour to refer to the extract from the Proceedings of a Meeting of the Tramways Committee held on 9th April 1925, wherein it is noted that I informed the Committee that a proposal for running railless trollies in the City similar to those existing in other cities in Europe would shortly be placed before the Corporation and to submit a proposal from the Tramways Company as set forth in their letter No. 3019/25 of 25th March 1925, to run railless trollies from their Dadar Tram Terminus to the King's Circle on the reservation already laid out by the City Improvement Trust on which it was originally intended to lay tram tracks. This particular route has been selected for experimental purposes as the proximity of the Company's workshops will facilitate attention to engineering details and the reservation adapts itself to the training of drivers before transfer to more crowded routes. After exhaustive trials have been made on this route, the Company intend to submit to the Municipal Corporation proposals for the extension of the trackless trolley system from King's Circle to Sion, along DeLisle Road to Mahim as well as from Mahaluxmi Station to Worli. The Tramway Company state in their letter of 7th April 1925 that they are prepared to bear the whole cost of constructing the surface of the reservation from Dadar Terminus to King's Circle. They also undertake the responsibility for the maintenance of the surface during the trials. The fare of half an anna proposed for this journey is reasonable, and in the circumstances I am of opinion that the Corporation should give its assent to the proposals on the understanding that the arrangement is only tentative for a period not exceeding three years and will be liable to revision at the conclusion of that period."

As the matter came up before the Corporation earlier than it was anticipated and sanctioned by that body, the question rather suddenly became urgent. The General Manager, therefore, strongly favoured the experiments being made with the least possible delay. Working on the basis of the Report of Sir Stanley Reed and Mr. A. T. Cooper, he recommended the Board on 22nd September 1925 to authorise him to—

- (a) order 3 Straker-Clough Chassis, together with 2 bodies for two chassis from England, and the necessary spares ;
- (b) to construct the third body in the Company's Workshops ;
- (c) to order sufficient overhead material from England to construct the proposed route ;
- (d) to construct the road surface with several different methods of construction with a view to obtaining data as to the wear thereon caused by trackless trolley vehicles ;
- (e) and generally to take all steps necessary to ensure the commencement of the experiments at the earliest possible date, and thereafter to conduct all experiments and trials that may be necessary from the engineering and traffic points of view.

“ For this trial we apparently shall only have to bear the usual motor lorry taxation (Rs. 60 per vehicle per quarter) and shall not be charged for the use of the reservation and surface thereof, which latter we shall have to construct and maintain.”

The matter was considered by the Directors on 25th September 1925, and they decided to put it in abeyance, pending the return of Sir Stanley Reed, chiefly on the grounds that they wished complete and definite arrangements made with the Municipality as to the ultimate working of trackless trolley, prior to the inauguration of the proposed experimental section. The special reasons for holding the matter in abeyance till the return of Sir Stanley Reed were—

- (a) the Company should not accept any liability for the maintenance of the roads ;
- (b) that general terms for the user of the roads should be settled before the experiment was proceeded with ;
- (c) that this, and any other trackless trolley service, should be apart from the Deed of Concession, whose provisions should have no application thereto.

From the above reasons, it would appear that the Board did not agree that the cost of making up the road on the reservation should be thrown on the Company. Sir Stanley Reed,

therefore, after his arrival in India sought an interview with the Municipal Commissioner, Mr. H. B. Clayton, to discuss the matter. He wrote to the latter on the 8th December 1925 as follows :—

“ Apropos of our conversation on Saturday, the particular question Moberly and I would like to discuss with you at your convenience is the proposed trackless trolley service from Dadar to King's Circle.

“ The Corporation have, under their Resolution No. 6419 of 17th September 1925 accorded their approval to our proposal to run railless trollies as an experimental measure on this route with the proviso that the arrangement is to be for three years only and liable to revision at the end of that period.

“ We have gone very carefully into figures, on data gained when I was in England, and find that it would cost us at least Rs. 1,50,000, to construct this line on the terms proposed ; the Board does not think that the cost of making up the road on the reservation should be thrown on the Company. On the most conservative estimate of expenditure and liberal estimate of revenue, the annual loss on the service will be not less than Rs. 17,500 per annum. It is not a business proposition, nor have we ever regarded it as such. We have from the first treated this as an experiment to see if we can discharge our responsibilities as a public utility company to provide transportation facilities where trams are not running, through a means more economical than trams and motor buses, neither of which in Bombay under present conditions can be made to pay commercially. We are satisfied that the railless trolley does provide this means, and we are prepared to ask the Board to incur this loss on an experimental service under certain conditions.

“ We are certain you will recognise that we could not ask the Board to incur this loss, and if we did the Board would never agree, without some general assurance with regard to working routes, should this experimental service prove a success. The assurance we desire is that if this experiment is a success—of which personally, having seen the system at work in England, I have no doubt—the Corporation will agree to its application to other routes, to be decided in consultation with the Municipality, on fair terms for the user of the Municipal roads, which will be maintained in a suitable condition. In England the general rule is for railless buses to pay the standard motor license and no more. We suggest that the ordinary motor license fee per bus is the principle which should be adopted here, because that is all motor buses which might run in competition with us would be charged, and we have every reason to believe that owing to the smoothness of running of an electrical vehicle the wear and tear of roads with railless bus would be less than with a motor of the same capacity. We assume that this will be a special arrangement with the Municipal Corporation to which the conditions of the Deed of Concession will not apply.”

1926.

The interview asked for by Sir Stanley Reed with the Municipal Commissioner took place on the 29th January 1926. What happened at this meeting and the recommendations made to the Board in the light of this interview are described below by Sir Stanley Reed and the General Manager in the Joint Memorandum submitted by them on the 4th February 1926 :—

“ We then stated the Company's case, which was that the roads should be maintained by the Corporation in a state fit for trackless trolley services, and that the Company should not pay for the user of such roads more than the registration fees charged to motor buses, which might compete with trackless trolleys.

“ The Municipal Commissioner argued that as trackless trolleys did not run on pneumatic tyres, they were harder on the roads than motor buses on pneumatics, and for this reason, as well for the fact that they are more economical in running than motor buses, they might pay a higher registration fee.

“ A possible compromise was reached on the basis that trackless trolleys should be allowed on routes to be approved by the Municipal Corporation and each trolley bus should be charged a fee not more than twice that fixed under the Municipal Act for motor vehicles of equivalent weight, *i.e.*, Rs. 40 per quarter, unless pneumatics are fitted, when the tax would be the ordinary one. If the Board approve of this principle, then it is suggested that the Municipal Corporation be addressed in terms of the annexed letter.

“ We see no reason to modify our view that the trackless trolley commands marked advantages over the petrol bus in economy of working, ease of control, speed, acceleration, smoothness and silence in running; moreover the trackless trolley uses energy which we retail, electricity, whereas the petrol bus uses energy which we should have to buy, petrol.

As desired by the Board, the General Manager then wrote to the Chairman of the Bombay Improvement Trust and to the Municipal Commissioner. The General Manager's letter, dated the 12th February 1926, to the former and his reply thereto of the 24th March 1926 are given below :—

General Manager's letter of 12th February 1926 to the Bombay Improvement Trust :—

“ We have the honour to address you in regard to the reservation between our present Dadar Tramway Terminus and King's Circle, which, we understand, still vests in the Trust. You will doubtless remember that the construction of a tramway between the above points was originally sanctioned. But that later the Municipal Corporation approved of our proposal to equip that route

and run an experimental trackless trolley service thereon. When applying for this latter method, we undertook to make up the reservation and maintain the surface during the trials. We did this merely with a view to obtain local data, as to the road wear caused by such vehicles, and you will recognise that it is not an obligation we could accept generally, were the use of trackless trolley to be adopted elsewhere.

" A question however has arisen as to the fees which would be levied by the Municipal Corporation for user of the roads in the event of trackless trolley being generally adopted. My Board consider that this must be settled prior to embarking on experiments, which would prove useless, if user fees were thereafter fixed at such rates as would jeopardise the success of any trackless trolley extensions. I am therefore addressing the Municipal Commissioner, setting out my Board's suggestions as to user fees and trust that a settlement of this important question, satisfactory to both parties, will be arrived at within the not very distant future.

" My purpose in addressing you now is to enquire whether your Board will assist us in this experiment, of which the cost to us will be not inconsiderable, to the extent of not requiring us to carry out more construction work on the surface of the reservation as it exists at present than will be necessary to ensure the safe running of the trackless trolley vehicles during the experimental service.

" We feel that you will realise the force of this request when we say that a decision as to the continued use of trackless trolley on this route must depend on the result of the trials. We have every reason to suppose and hope they will prove eminently satisfactory. On the other hand they may not, and it may be necessary to revert to tramways or other means of transport thereon. Consequently we are anxious only to be involved in the minimum of work compatible with safe running during the trial service.

" My Board feel that, in the event of the trial service proving satisfactory and warranting the extended use of trackless trolley vehicles in the City, the question of providing a suitable surface on the reservation under your control will be a matter for discussion between your Board and the Municipal Corporation, to whom this Company will be required to pay fees for user of the roads."

Reply from the Bombay Improvement Trust, dated 24th March 1926 :—

" With reference to your No. 1664 of the 12th ultimo, I have the honour to inform you that the Board are prepared to assist your Company in their experiments with trackless trollies and will not require them to do anything more during the experiments than to make up the road in such a way as is required to ensure the safe running of the trackless trolley vehicles.

" As regards the extension of the service to other routes in the city, the Board are of opinion that if any special form of construction is necessitated by reason of the running of the trollies the same should be done by your Company or the Municipality."

To the Municipal Commissioner, the General Manager wrote as follows on the 18th February 1926 :—

“ With reference to your letter No. E.G. 33.C of the 20th October 1925, according to the approval of the Corporation to this Company's proposal to run trackless trolleys as an experimental measure from our Dadar Tramway Terminus to King's Circle, I am desired by my Board to place the following considerations before the Municipal Corporation.

“ The service proposed would involve this Company in a considerable capital expenditure, approximately two lakhs of rupees, on which there will be for some considerable period a working loss. Whilst this Company is willing to take its share of the cost of extending transportation facilities in the City, my Board consider that, before this expenditure is incurred, there should be a general arrangement with the Municipal Corporation as to the charges to be made for the user of the roads by trackless trolleys, if the experiment under contemplation is a success ; and a definite undertaking given that this service and any trackless service which may be sanctioned by the Municipal Corporation do not come within the Deed of Concession whose provisions shall not apply thereto.

“ I have to suggest that the most equitable arrangement would be to charge trackless trolleys the same tax as is imposed on mechanically propelled vehicles under Schedule G of the City of Bombay Municipal Act of 1888. But in view of the fact that trackless trolleys are not equipped with pneumatic tyres, we should be prepared to agree that the charge to be levied on any service in the City which might be sanctioned by the Municipal Corporation should be not more than twice the tax on mechanically propelled vehicles of the equivalent weight fixed under Schedule G, this tax to be the total Municipal charge on all such trackless trolleys and the overhead electrical equipment, and to be reduced to the standard charge in the Schedule if, after experiment, it is found practicable to use pneumatic tyres.”

On the 12th March 1926, while referring the proposals contained in the General Manager's letter to the Corporation, the Municipal Commissioner wrote as follows :—

“ I have discussed these proposals at length with the representatives of the Company and the Executive Engineer and would make the following observations. It is undoubtedly fair that the Company should be informed of what taxation they will be liable to before they incur considerable expenditure on making experiments ; but if trackless trolleys are to run with solid tyres, it will be necessary to adopt a very expensive form of road construction to enable the cost of maintenance to be kept at a reasonable figure.

“ On the other hand it will be possible always for the Municipality to refuse permission for services to be run over roads which are not constructed in such a manner as to withstand all kinds of

traffic and subject to this understanding I am of opinion that the proposals of the Company are not unreasonable but that as the trackless trolleys will be running continuously on a particular portion of specified roads and will for that reason be liable to cause greater wear and tear they should be liable to pay if fitted with solid tyres twice, and, if fitted with pneumatic tyres, once the maximum rate chargeable from time to time under Schedule G to the Municipal Act on vehicles propelled by machinery and used for commercial purposes."

The matter, as suggested by the Municipal Commissioner, was referred by the Corporation on the 19th April 1926 to the Tramways Committee for consideration and report.

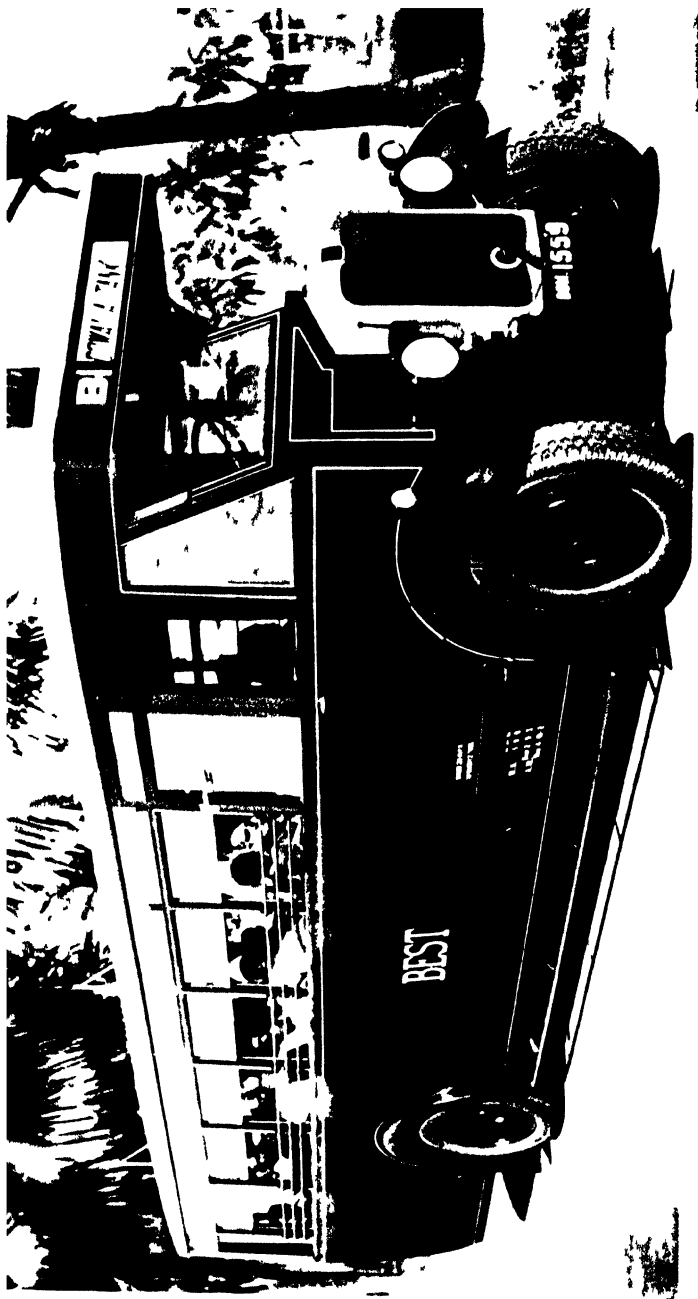
Some months passed during which the Company inaugurated regular omnibus services in the City.

The General Manager's letter of 26th January 1927 put an end to this question for the time being. He wrote to the Municipal Commissioner as follows :—

" Since this Company made formal application for permission to construct this experimental line on the 25th March 1925, it has made an extensive trial with motor omnibuses in Bombay. This indicates that there is a field for the motor omnibus, and that in certain conditions it has advantages in flexibility over the trackless trolleys.

" The present intention of the Company is therefore to concentrate on the motor omnibus in providing transportation facilities additional to those furnished by the existing tramways. The route proposed to be served by the experimental trackless trolley line has been listed for a motor bus service as soon as traffic conditions warrant it.

" I shall be glad, therefore, if you will allow the application for the experimental trackless trolley line to remain in abeyance until the traffic possibilities of the route have been tried out by motor omnibuses, and until it is established by this means that the traffic offered will justify the heavy capital cost of a trackless trolley line."



OMNIBUS

CHAPTER 14.

Omnibuses.

1913

In 1913 the Government of Bombay appointed a Committee for the Development of the Town and Island of Bombay. Mr Rimington was invited to give evidence before the Committee but preliminary to his doing so he was requested to submit his views in writing regarding the potential extensions of the Electric Tramway System. In his Memorandum, dated the 15th December 1913 Mr Rimington wrote as follows in connection with the Motor Omnibus Service —

The question of the inauguration of Motor Omnibus services upon some routes within or outside of the city having been referred to by some of the witnesses before your Committee it is perhaps desirable that I should submit my views thereon. My Company is I think clearly in a more favourable position to start and work such services than anyone else and I did we regard them as a practical commercial proposition would offer to introduce them. In a letter I am addressing to the Commissioner of Police and also forwarding to the Corporation I have submitted our views and asked to be favoured with theirs regarding certain aspects of this question with a view to its further consideration. Personally as the result of much careful study of the matter in England I am convinced that upon any thing like the same basis of fares as those charged upon the Railways and the Tramway motor buses could be operated in Bombay only at a heavy loss. I think that the consideration of a few figures will demonstrate this. Mr J. B. Hamilton a well known expert in a paper upon Urban Transportation recently read by him before the Light Railways and Tramways Association places the present cost of operating motor buses in England at 10 pence per mile and a careful consideration of what the operating costs would amount to at Bombay (where traffic wages would be lower but consumption of petrol depreciation and some other charges higher) affords in my opinion no likely prospect of this figure being reduced out here. If it costs us 10 pence (10 annas) per mile to run our trams the Tramway would be working at a loss. And yet the average carrying capacity of our trams is 53 passengers per unit where as the average carrying capacity of the motor buses would not exceed 30 passengers per unit top seats being unusable here during the monsoon. Stated otherwise the potential earning capacity of our tram cars on the same scale of fares is nearly double that of the motor bus while their operating cost is less by nearly half. If therefore the

tram-cars could only be run at a loss at an operating cost of 10 annas per mile, that loss, on the assumption that that would be the cost per mile of running motor buses here, would in their case manifestly be much larger. Apart from this financial aspect of the question, the objections from the point of view of public safety to the introduction at Bombay of motor buses are very weighty. In England the number of accidents caused by these vehicles largely exceeds those caused by any other class. If this be so in London and other British cities where pedestrians keep to the pavements, and vehicular traffic is very efficiently controlled by the police, the danger to life, limb, and property in an Eastern city where the people scatter all over the roadway, and where traffic cannot be regulated in the same way, would be enormously increased. The fact that motor bus services have taken a grip on London, and are supposed to be operated at a satisfactory profit there, is often misconstrued in its application to other cities where the conditions are widely different. At London these buses serve the largest and highest wage-earning population in Europe, they run upon the finest road surfaces in the world, they work upon a tariff of fares at least twice as high as that which could be imposed or paid at Bombay, and they have no tramway competition to meet on most of the main arterial routes. Any analogy drawn from London results is therefore exceedingly misleading. And, although accepted in England, these vehicles are by no means popular on the Continent. In many of the large cities there they are prohibited, and when an English Company recently applied for a Concession to run them, as feeders to the tramways, in the suburbs of Munich, their introduction was strongly opposed, and although the Municipality finally granted sanction, the services are languishing for want of public support, and are, I hear, likely to be withdrawn."

As stated in his Memorandum, Mr. Rimington addressed a letter to the Commissioner of Police on the 30th December, 1913, which was as follows :—

"You will doubtless be aware that the question of the expediency of establishing a motor bus service for the Town and Island of Bombay has not infrequently been mooted, and I am desired by the Board of this Company, who have on more than one occasion had the matter under their consideration, to address you on the subject.

"On behalf of motor bus services it is usually urged :—

1. That they possess greater flexibility in operation than tramway services ;
2. That they can be transferred from one route to another in response to the varying demands of traffic conditions ;
3. That owing to their not being run on a rigid track they can thread their way through the other vehicular street traffic and thus render their adoption practicable in streets too narrow for a tramway line.

" On the other hand the special conditions obtaining at Bombay present several difficulties to the introduction of a motor bus service here. The cost of running those buses would be much higher than is the cost of running tram-cars, a fact which would of course entail a correspondingly higher scale of fares. Moreover, the experience of London and other large cities has demonstrated that in crowded thoroughfares a motor omnibus service involves a greater risk of accidents than is the case with tramways. If that be so in the case of European cities, it can hardly be doubted that this risk would be intensified in the streets of Bombay (so many of which are unprovided with footpaths) where the people scatter themselves all over the roadway, and where so much of the driving of the bullock cart and other vehicular traffic is so erratic. In this connection it must also be remembered that the motor vehicle driver obtainable in Bombay is not equal as an expert to the driver obtainable in Europe.

" It is evident that this Company with its existing organisation, and with its power of ensuring intercommunication with its present tramway system, is in an exceptionally favourable position for undertaking the introduction of a motor bus service at Bombay, should such a service be called for by any large body of public opinion, and should it on further enquiry into the terms and conditions upon which it could be run prove itself to be commercially a practicable proposition. Before proceeding further with this enquiry it seems to my Board desirable that they should first of all ascertain your own attitude and views in the matter as the Licensing Authority and those of the Municipal Corporation in whom the proprietorship of the roads is vested. Should your own and the Municipal views favour the introduction of motor buses here, my Company will then take steps to submit proposals for, at all events introducing an experimental service. On the other hand, if you, as the Licensing Authority, and the Corporation as the guardians of the public interest, are opposed to any such departure it is clearly useless to proceed further with the examination of its commercial feasibility.

" It being probable that the establishment of motor omnibus services in streets already occupied by the tramway will at once be regarded as inadvisable both by the Local Authorities on the ground of public safety and by any operating Company on the grounds that they are not required and could not possibly pay, it would appear that the routes deserving examination will, if the matter be proceeded with, be comprised in one or other of the two following categories :-

1. Feeder lines in the north of the Island
2. Subsidiary and more or less parallel lines on the fringe of the Fort and City.

" In order to submit a concrete issue for your judgment I am desired to attach a list indicating under each of those heads certain routes over which it is suggested that motor buses might perhaps be operated. This list is not submitted as necessarily

a comprehensive one, but is merely for the purpose of eliciting your views as to what, in the event of motor 'buses being allowed at all, would be the routes excluded and the routes allowed.

" I am sending a copy of this letter to the Municipal Commissioner, and propose, with your permission, to send him a copy of your reply thereto as soon as we receive it from you.

" My Board fully realise that that reply will be confined to the expression of your general views as to whether or not it is desirable, in the public interest, to proceed further with negotiations for introducing a motor omnibus service at Bombay, and that it will not commit you to any assurance that a License for that purpose will be granted, until all such questions as to the type of vehicle to be adopted, the routes to be permitted, the rate of speed, etc., have been duly settled. Similarly, my Company, must not be understood as committing itself to any definite undertaking to introduce a motor omnibus service here until those questions, and the equally important one of the tariff of fares, have been discussed and mutually agreed.

" In this letter I have confined my remarks to the subject of petrol motor buses but, in connection with the question of their possible introduction at Bombay on certain routes, it should be borne in mind that trackless trolley electric cars might prove a preferable alternative "

LIST OF ROUTES.

Feeder Lines in North of the Island.

From the Junction of Parel and Kalachowki Roads, along the latter, Jackeria Bunder, and Sewri Roads to a point near the Sewri Cemetery.

From the present Tardeo Tramway Terminus along Mahaluxmi Road to the Mahaluxmi Temple

From the present Vincent Road Terminus along Bhowwada Road and Naigaum Road to Wadala.

Subsidiary or more or less parallel lines

From Malabar Hill to Flora Fountain *via* Walkeshwar Road, Queen's Road, Princess Street, Girgaum Road, and the Esplanade.

From Babula Tank Road to Carnac Road *via* Dongri Street.

From Sassoon Dock Tramway Terminus to Colaba Point.

A copy of this letter was forwarded to the Municipal Commissioner on the 5th January, 1914. While doing so, Mr. Rimington wrote to the Municipal Commissioner as follows :—

" Should it be the opinion of the Municipality that any system of urban or suburban public transportation by mechanical traction is called for at Bombay in addition to the railways and the tramway, I have the honour to say that, in my opinion, such auxiliary service could be more satisfactorily supplied by means of trackless trolley electric cars than by means of petrol motor

omnibuses. The very low tariff of fares existing at Bombay presents, however, considerable difficulties to the introduction here of either."

The reply of the Police Commissioner, Mr. S. M. Edwardes, dated the 4th March, 1914, was as follows:—

"With reference to your letter No. 9747 13, dated 30th December, 1913, I have the honour to state that at the present stage of the City's development I am not inclined to favour the introduction of motor buses, and I hold that until we have obtained a larger proportion of wide roads and the general public has learnt more clearly than at present that the centre of the thoroughfare is not intended for pedestrian traffic, we ought to deprecate the introduction of the motor omnibus. It is stated that a motor omnibus can be used on streets too narrow for tramway lines, and is presumably therefore safer in such streets than a tram would be. This may be true in London, where the general public is on the look-out for traffic, when crossing a road and keeps to the footpath. But I hardly think the dictum applies to Bombay and that in many ways the tram is safer in narrow streets as it runs on a fixed track which serves as a reminder to the public that the particularly strip of land covered by the rails is to be avoided. Again even in London where the general public is far more careful and understands the art of self protection more fully than in the East the introduction of the motor omnibus has, I believe led to a large increase of accidents. I see no reason to suppose that the experience of Bombay would be any different, and to judge by present conditions I should say that the percentage of accidents would be greater than in London. I should further like to be assured that the vibration caused by motor buses would not have a disastrous effect upon some of our rain-soaked chawls during the monsoon.

"The City and Island of Bombay is at present in the embryonic stage of development which will have advanced considerably in another ten years and I incline to the belief that it would be wiser to wait for a few years until our new roads and arteries have actually come into use, before introducing fresh methods of transport. The question of development is in the air, and everything points to the opening up before many years are past, of fresh areas for residential accommodation or mercantile needs. I should myself prefer to wait until the various schemes, now under consideration are not only launched but nearly completed before deciding that the introduction of a motor bus service was not only desirable but actually necessary."

Mr. Rimington also forwarded a copy of the Police Commissioner's letter to the Municipal Commissioner for his information and added:—

"You will note that having regard to the views expressed by the Commissioner of Police, my Company does not propose to proceed with an application for sanction to introduce a service of motor omnibuses here.

1919.

Nothing further was done in connection with the introduction of motor omnibuses till 1919 when Messrs. Rimington and Cooper again assembled all available data bearing on this proposition and arrived at the same result as Mr. Rimington had come to in 1913.

1922.

On the 11th July, 1922, Mr. C. Lucas, the Traffic Manager, again raised the question.

Mr. Cooper also fell in with the idea although he was in favour of considering trolley buses. He wrote (12-10-1922) that motor buses could be used to supplement the Tramways in four ways :—

1. As feeders to tramway routes.
2. As links between tramway routes.
3. To pioneer new tramway routes.
4. As a means of furnishing a "de luxe" service paralleling and extending existing tramway routes.

The Company, however, did not propose to operate buses in Bombay, the chief objection being that it was impossible to charge such fares as would yield the necessary revenue to make them a paying proposition. The matter was thus dropped again.

1926.

The matter was again taken up in 1926 and on 10th February, 1926, the Board decided to run a small fleet of buses as an experimental measure. The General Manager, therefore, applied to the Commissioner of Police on the 25th February, 1926, for permission to run these buses. His letter ran as follows :—

" It has been represented to my Company that the provision of a motor omnibus service in certain parts of the City, which are not served by tramways or railways, would be a convenience to the public.

" We propose to establish services, subject to your approval, with a view to determining whether there is scope for the use of motor omnibuses in the Town and Island, and whether there is, especially in the northern part of the Island, a potential traffic

sufficient to justify the extension of the tramways or the establishment of trackless trolley services.

" If you approve of these services, we propose to begin with six motor omnibuses. The type we have decided upon is the Thornycroft " A1. Long " Chassis, with a single deck omnibus body, to hold 24 passengers with standing room for two or three. This type has been chosen, after investigation of the experience of Calcutta, as the omnibus most suited to Indian conditions.

" The routes which we suggest as best suited for these services are as follows :—

- (a) Afghan Church to Crawford Market *via* Middle Colaba, Wodehouse Road, Museum and Bori Bunder.
- (b) Dadar Tramway Terminus through the Parsi Colony to King's Circle, and possibly through the area lying to the south of the Mahim Chord Railway between Kingsway and the G.I.P. Railway.
- (c) Opera House Tramway Terminus to Lalbagh *via* Lamington Road and Arthur Road.

" We venture to invite your special consideration to the following points :

" The proposed services will be the best possible under Indian conditions. The chassis will be by the famous firm of Thornycroft ; the bodies well built and smartly maintained, profiting by recent Calcutta experience. The drivers will be specially selected and trained, so that we may give Bombay a motor omnibus service as near as local conditions permit to those in England.

" A motor omnibus service on such lines, the number of omnibuses being strictly proportioned to the traffic, will, we think, reduce rather than increase the congestion of the streets. Each omnibus will be capable of affording the same transport facilities as nine hack victorias or taxis and driven with care and at a reasonable speed will markedly reduce the number of vehicles on the streets.

" We shall be glad of an answer at your earliest convenience so that, if it is favourable, orders can be placed and the services inaugurated before the next monsoon."

After a protracted correspondence relating to various matters in connection with speed, specifications of vehicles, routes, starting points and terminals, and other details, the Commissioner of Police gave his permission allowing us to run the buses.

Public notifications were given and a regular ten minutes service began to run at a speed of 20 miles per hour from the

15th July, 1926, from Afghan Church, Colaba to Crawford Market *via* Wodehouse Road and Hornby Road from 6-30 a. m. till 11-20 p.m.

The advent of the motor buses in Bombay greatly perturbed the local taxi-drivers, who petitioned the Commissioner of Police to protect them from this invasion into their sphere. They contended that when a powerful body like the Tramway Company with all their resources and influence was permitted to ply for hire in the city, the taxis would soon be wiped out of existence being unable to withstand the competition. To add insult to injury, they said, the stopping stations of the motor buses were located close to the taxi stands. Yet another point made by the taxi-drivers in the petition to the Commissioner was the fact that the license fees paid by the buses were considerably below the fees collected from the taxis, even when the number of buses plying for hire was increased. The Commissioner's reply was couched in gentle terms, but contained stern reasoning. The competition of the bus service, it was pointed out, was absolutely legitimate and the Police were under no obligation to help one class of public conveyances in the city against another. The signatories were informed that they were unduly anxious about their position, and taxi cabs were in demand side by side with buses in all the big cities of the world. If anything, the victorias would suffer. The bus and taxi cab had between them driven out the horse-driven vehicles in most large cities, and it was reasonable to expect that that would be the ultimate result in Bombay. There was no sign, the reply proceeded, of the extinction of the taxi cab in English towns in spite of the fact that buses competed with them by the thousand. There were many areas in Bombay untouched by taxi cabs, and the class of the public who rode in buses were mainly of a different social class to the taxi cab fare.

The question of extending the Passenger Motor Transport business was thoroughly considered and the Management came to the conclusion that the psychological moment had arrived when the Company must decide whether it would develop its omnibus service.

On the 6th January, 1927, the Board sanctioned the construction at our workshop of 20 additional buses—18 on Thornycroft Chassis at an estimated cost of Rs. 12,000 and 2 on Dodge Chassis at an estimated cost of Rs. 8,500 each.

On 11th January, 1927, the General Manager issued an order to reserve buses for use by private parties, etc., at the following rates :—

- (a) Rupee one per mile from Depot to Depot, and in addition.
- (b) Rupees five per hour or part of an hour "standing time."
- (c) Minimum charge for any one reservation to be Rs. 12.

Six additional buses were sanctioned and the whole fleet consisted of 48 buses in June, 1927.

The total number of omnibuses is given below

1926.	24 Buses (22 Thornycroft and 2 Dodge)
1927.	48 Buses (46 Thornycroft and 2 Dodge).
1928.	50 Buses (48 Thornycroft and 2 Dodge) 4 Char-a-bancs (2 Thornycroft and 2 Daimler)
1929	50 Buses (48 Thornycroft During this year one Dodge Bus was converted into a Lorry and the other one sold) 4 Char-a-bancs (2 Thornycroft and 2 Daimler)
1930	48 Buses (Thornycroft). 6 Char-a-bancs (2 Thornycroft, 2 Daimler & 2 G M C)
1931.	54 Buses (48 Thornycroft, 2 A E C , 2 Leyland & 2 G M C). 6 Char-a-bancs (2 Thornycroft, 2 Daimler & 2 G M C)
1932	54 Buses (48 Thornycroft, 2 A E C , 2 Leyland & 2 G M C) 6 Char-a-bancs (2 Thornycroft, 2 Daimler & 2 G M C).
1933.	64 Buses (50 Thornycroft, 2 A E C , 2 Leyland, 2 G M C , and 8 Albion). 4 Char-a-bancs (2 Daimler and 2 G M C)
1934	76 Buses (50 Thornycroft, 2 A E C , 2 Leyland, 2 G M C , and 20 Albion) 4 Char-a-bancs (2 Daimler and 2 G M C)
1935.	98 Buses (29 Thornycroft, 2 A E C , 2 Leyland, 2 G M C and 63 Albion) 2 Char-a-bancs, G M C

The omnibuses were at first insured with the Commercial Union Assurance Co., Ltd., Bombay, mostly at the value of Rs. 12,000 each. This has since 1928 been discontinued, and the Company itself carries the risk under its Insurance Account. However, to obviate third party risks, all the buses were with other motor vehicles of the company insured with Lloyds in London. From 1934, the third party risk is

borne by the New India Assurance Co., Ltd. According to this, the Company bears all the risks up to Rs. 45,000 and the insurers indemnify the assured for an amount up to Rs. 2,00,000 ultimate net loss on account of each and every accident for which the assured becomes liable.

The following are some of the particulars in connection with the omnibuses :—

Annual Road Tax per omnibus paid to Municipality	Rs. 160.
Registration License fee paid to Police	Rs. 32.
Omnibus Permit paid to Police	Rs. 5.
Petrol	7 M.P.G.
Approximate mileage of each omnibus per annum is 35,000.	

The expected life of the chassis is 6 years which is equivalent in our case to approximately 200,000 miles.

The advisability of a Central Garage properly laid out and capable of being extended to deal with the probable increase of buses was considered. A suitable garage was built at our Colaba Depot and this was brought up-to-date with full repairing appliances when a strip of land admeasuring about 3,042 square yards belonging to the G.I.P. Railway was purchased from Government in 1930 at an approximate cost of Rs. 1,00,000. To this, another plot of land, admeasuring 3,825 square yards, purchased from the Wadia Trust Settlement at an approximate cost of Rs. 70,000 was added in 1932.

As the number of omnibuses is increasing, provision for a more commodious garage is becoming more pressing. A plot of land, 2,358 square yards, was therefore taken on lease from the Improvement Trust, Bombay Municipality, at Tilak Road, Dadar, and negotiations for the purchase of more lands from other parties in the vicinity are in progress.

The omnibus fares varied from annas two to annas six according to the length of the distance. The Company was against half fares for children and transfer tickets. As, however, the buses began to run at a loss, the half fare for children was introduced from 19th August, 1928, subject to a minimum charge of one anna and the minimum rate was reduced to one anna from two annas from 9th March, 1930 ; discount tickets were also issued from this date.

Return tickets in buses were introduced from the 4th March 1928, but were discontinued from 19th August of the same year.

Letter boxes for carrying letters to the G. P. O. were installed in the buses to facilitate people to dispose of their urgent letters from 1st September 1928, but this method of helping the people and the Post Office was discontinued from 1st September, 1930.

TRAFFIC COMMITTEE.

The Government of Bombay had by their Resolution, Home Department, No. 3528/2, dated the 15th January, 1929, appointed a Traffic Committee to regulate vehicular traffic in the City of Bombay.

The Commissioner of Police, Bombay, in his report, No. 2269 M.V., dated the 18th March, 1930, to the Government of Bombay, brought to the notice of Government the advisability of appointing on the Traffic Committee a member of the Company's staff. His reason was that very often when considering traffic questions it was necessary to consult the Company on certain technical questions and the presence of one of its officials on the Committee would, he considered, be very helpful to the members as whatever information they might require would be readily available.

The Government having sanctioned the appointment of a representative of the Company on the Committee, the Company nominated, Mr. H. C. Quinn, the Traffic Manager thereon, who attended the meeting for the first time in June 1930. After the retirement of Mr. Quinn in 1931, Mr. F. Aulton, the present Traffic Manager was nominated on the Committee.

At the Committee meeting held on 27th March, 1933, Sir Patrick Kelly, the Chairman, pointed out that at that time only one Omnibus Company was in existence in Bombay, but it was not improbable that when the financial situation changed for the better, other omnibus operating companies might come into being and wish to operate services on routes which were already served. His opinion was that traffic in the City did not justify more than one Company operating any single route and it was therefore his intention not to

license two services for any route. A question that would sooner or later come up for discussion was what policy was to be followed if a new Company offered to run a service at a cheaper rate than the existing one. The Chairman was of the opinion that no such offer should be accepted without full examination by the licensing authority to ascertain whether the rate was a reasonably profitable one. The Committee signified their general approval of these views with the reservation that in each particular case they had the right to offer their opinions.

A letter from the Vice-President of the Bombay Tenants' Association asking for the discontinuance of bus services in Girgaum and Thakurdwar Roads and Kandewadi Lane was considered by the Committee at their meeting held on 26th June, 1933. It was alleged the services were unnecessary and dangerous to the inhabitants of those localities. The Chairman stated that the police reported the services to be well patronised and gave statistics to show that omnibuses were involved in a very small proportion of accidents in those roads. It was agreed that no case had been made out for discontinuing the services.

CHAPTER 15.

Traffic and Workshop Employees Strikes.

1907

Some time in the beginning of 1907, the Conductors and Drivers petitioned for an increase of pay but were then informed by the Managing Director that an increase would be granted them as soon as the electrical service was established. Heretofore, while our Inspectors and Starters received monthly wages, our Conductors and Drivers were paid by the trip. On the 22nd April, 1907, a number of Conductors (about 168 in number) petitioned the Managing Director for 'the undermentioned favours' on the ground of steady and continual heavy rise in the prices of foodstuffs, high rent and increased price of other necessities of life.

I *Fixed minimum salary subject to a maximum promotion.*—(Under the existing trip system of wages the average pay earned by the Conductors was Rs. 22 per month, and by the Drivers Rs. 17 per month). A system of monthly wages on a minimum number of hours of work instead of payment by trip was introduced. The reasons given by the Managing Director were —

- (1) It would attach the men to the service
- (2) That it would conduce to more regular attendance and
- (3) That by introducing a reasonable duration of daily work it would keep the men more fit for the efficient performance of their duties.

The rates of pay as sanctioned from 1st June, 1907, were as follows —

<i>System of Calculating Wage</i> 261 hours per month or 29 days per month of 9 hours	}	For both Conductors and Drivers.
2 hours waiting duty each week		

<i>Rate of Pay —</i>		Conductor	Driver
		Rs a p	Rs a p
A Class of 2 years service per month	20	0 0	17 0 0
B Class from 2 to 5 years , ,	25	0 0	20 0 0
C Class above 5 years , „	30	0 0	25 0 0

<i>Duty</i> Additional hours to be paid for Such days were not to be forced on a person except when required by the Company. These days were Cocoanut Fair and other holidays.	}	For both Conductors and Drivers
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Rate of Overtime —

	<i>Conductors.</i>					<i>Drivers.</i>				
A Class ..	18	pies	per	overtime	hr.	15	pies	per	overtime	hr.
B Class ..	18	"	"	"	"	15	"	"	"	"
C Class ..	22	"	"	"	"	18	"	"	"	"

Less Time —Less hours worked during the month were to be proportionately deducted from the monthly pay. } For both Conductors and Drivers.

II. *Free Uniform.*—This was not acceded to. The Conductors and Drivers were asked to pay the cost of clothing as heretofore.

III. *Free Passes on Tramway Lines.—Coupon Pass:* One book of 60 tickets free of charge per month to both Conductors and Drivers. Any addition to be charged at usual rate.

IV. *Nine Hours Duty.*—This was acceded to, with 2 hours waiting duty each week.

V. *One Month's Privilege Leave with Full Pay every Year.*

Privilege Leave: 2 weeks yearly on full pay. This could be accumulated, *i.e.*, 4 weeks during the second year, and 6 weeks during the 3rd year.

Holiday: 1 day leave per month on full pay.

Good Conduct Badge.—Besides the above, Good Conduct Badge was to be given to the Conductors and Drivers. This carried with it one rupee extra to be paid every month.

The men were informed that any representation of their grievances should be made to the Managing Director by deputation of 6 men and not through any petition or correspondence.

1908.

During the latter part of 1908, there was again discontentment amongst the Conductors and Drivers. A memorial signed by about 400 men was submitted to the Managing Director through Messrs. Dikshit, Dhanjisha & Soonderdas, a firm of Solicitors, wherein in all seventeen demands were made. The following changes were made in the rates previously sanctioned in 1907 and came into force from December, 1908:—

In System of Calculating Wages.—The pay of Conductors and Drivers to be regulated by the calendar month. Nine hours duty per day.

Extra List.—Conductors and Drivers to be paid for the actual number of days worked in a month. Those who attended on Waiting Duty twice daily and were not given cars, were to be paid 4 annas per day.

In Rate of Overtime.—Conductors and Drivers working overtime to be paid for overtime worked 25 per cent above the monthly scale of pay of their grade.

In Holiday.—Conductors and Drivers of Regular List entitled to two days leave monthly with full pay. Leave not taken to be paid for and added to monthly wages—the leave to accumulate if no pay taken for it. Accumulated leave could be granted to 20 Conductors or 15 Drivers every month if could be spared. One day's absence in a month without leave or without medical certificate to forfeit one day's leave or pay. Two days such absence to forfeit all leave for that month.

In Clothing.—Allowance of rupee one per month to be credited to the clothing account of Conductors and Drivers who did not absent themselves for more than three days per month, unless certified by a medical practitioner.

1910.

As the Traffic Organisation and the discipline amongst the men were bad, Mr. C Lucas was asked to take up the Traffic Managership with a view to re-organising the whole Department in April, 1910. The strength of the Department at this time consisted of 1 Traffic Superintendent, 3 Traffic Assistants, 16 'A' Class Inspectors, 20 'B' Class Inspectors, about 800 Conductors and Drivers, 23 Starters, 13 Time-keepers, 8 Regulators, 44 Pole-boys, 32 Flag boys and Signal men, 37 Trolley-men and 9 Ticket Memo-Clerks besides office clerks.

As much inconvenience had been caused during the preceding year by the men absenting themselves without leave, a notice was issued early in October intimating that the punishment for this offence would be the fine of a day's pay for every day's absence without leave in addition to the actual pay lost. This regulation was not enforced, as it was hoped that the fear of this definite penalty would improve the attendance. In this we were disappointed and on 22nd November a second notice was issued defining penalties for absence without leave. This notice, owing to the misrepresentations

of a few malcontents, was interpreted by a certain section of the men as intimating a general reduction in wages, and a meeting of above 400 men was held in an open space of ground situated behind the Post Office, Girgaum Back Road, on the 26th November, 1910.

Upon receipt of information about this meeting several of the long service men were interviewed and the misunderstanding explained to them. This had the desired effect of rapidly bringing home to the general body the fact that they had misinterpreted our intentions. However, the ring-leaders of the movement being determined to make capital out of the agitation they had started, collected money and signatures and had a Petition prepared, which was received on the 1st December, 1910.

Enquiries were then made amongst a number of the men who had signed the signature sheets, which were attached to the Petition, and it was made quite evident that very few of them had the vaguest idea of what their signatures were supporting. Half a dozen men picked out at random were interrogated and it was found that the whole trouble was the work of a few ne'er-do-wells, and that the main body of men were loyal and, if one or two minor grievances were taken care of, would be quite contented.

In order to remove any lingering impression that a general reduction of wages was in contemplation a short and emphatic denial to this was posted at the depots on the 2nd December, 1910.

On the 5th December, 1910, the Managing Engineer addressed a reply to the Petition of the men (which was posted in the vernaculars at all the Depots about mid-day and copies were printed for circulation) suggesting them to send him a deputation to discuss matters. The same night the men met on the Maidan and decided to strike on the morning of the 6th, apparently expecting that the Management would go to them and coax them back again by means of concessions.

As none of them turned up for the first cars out on the next morning, arrangements were immediately made to put on a curtailed service with the aid of Inspectors, Starters,

Clerks, Rolling-Stock employees and general volunteers from other departments. So willingly was the call responded to that by 9 A.M., there were nearly 100 cars in service. As there were no signs of the men either returning to work or sending a deputation, provision was made for mid-day reliefs and an excellent service was going until about 10 P.M.

On the 7th, an improvement was made on previous day's arrangement and by the morning rush-hour there was a schedule of 111 cars in service, the strikers remaining on the Maidan still expecting the Company to approach them. After consulting the Heads of the Police, who thoroughly agreed that the men had no justification for the action they had taken and that the Company was taking the right course in making no overtures to the men whatever, the Management continued enlisting new men and training other members of the Rolling-Stock Staff in order to strengthen the position in case a prolonged fight was made.

Later in the date the strikers began to come in in twos and threes and were taken back into service on the simple sacrifice of their pay for the time during which they had been absent, and from reports they brought in it was evident that in spite of the intimidation of the ring-leaders the patience of the majority was nearing breaking point.

After consulting the Police Commissioner (Mr. S. M. Edwardes) again the Managing Engineer posted on the morning of the 8th the following Notice on the Maidan : --

" The following men having left the Company's service without notice have now been replaced and will forfeit the pay due to them for the month of November in accordance with the terms of their Agreement. Upon the surrender at the Company's Head Office of their Badges and any other property belonging to the Company they will be given any pay due to them in respect of time worked since the 1st instant. --

" *Conductors* -- Nos. 5, 22, 26, 30, 44, 74, 101, 108, 114, 179, 184, 197, 241, 267, 270, 317, 333, 344, 346, 357, 408, 438, 439 (23 in all).

" *Drivers* -- Nos. 4, 26, 55, 68, 76, 83, 147, 186, 190, 202, 203, 240, 247, 285, 297, 299, 318. (17 in all).

" A further number will be replaced in the same manner during the course of to-day."

Shortly after the above notice was posted a deputation of the men went on their own initiative to see the Police Commissioner, who informed them (in accordance with an arrangement made with him) that he had neither power nor authority to deal with their grievances nor to make any promises on behalf of the Company.

The men assured him that they wished to return to work and he, therefore, advised them to send a deputation to the Managing Engineer as the latter had suggested before they took the course of going on strike. Upon an assurance being given that the positions of men acting as the strikers' representatives would not be prejudiced, a deputation of 6 old service men—3 Conductors and 3 Drivers—came to the office at 5 p.m. on the 8th December, 1910, and were interviewed by Mr. Lucas and Mr. Cooper with Mr. F. M. Gadney, the Deputy Police Commissioner, acting as an independent interpreter. The conference lasted about three hours and the following points were discussed :—

1. *Hours of Work.*—The men urged that their daily duty should never exceed 9 hours and that the time taken in going on and off duty (taking out and handing in cash, ticket boxes, etc.) should count as duty. We explained that it was the practice all over the world that Conductors and Drivers went to and returned from their cars in their own time and that we could make no exception. As regards the 9 hour limit, however, we agreed that this could be arranged if the men accepted the principle of working their duty in two shifts (half in the morning and half in the evening) for say one week in every 5.

This the deputation seemed disposed to agree to but said that they must consult their fellows.

2. The men asked for a Rs. 5 increase in monthly pay all round. This was emphatically refused.
3. The men stipulated that in the cases of all appointments to the posts of Inspectors, Starters, etc., men should be chosen from the ranks of the Conductors instead of new men being taken on. It was pointed out that since April last 27 men had been promoted out of the Conductor Class and that whenever men proved worthy of it we selected them for the higher posts, but that we must retain an absolutely free hand in the selection of our Inspectors.
4. The men complained that the fine of one day's pay for each day's absence without leave was understood by them to apply to *all* cases of absence without leave whether caused by sickness or other pressing emergency or not. This we

explained was not our intention but that the fine only applied to cases of *wilful* absence. This we agreed to make clear by the addition to the recent notice of the following proviso.

*" Absence without Leave —*It is the intention of the Management not to impose the fine of a day's pay for each day's absence without leave unless the Traffic Manager is convinced that the absentee has wilfully shirked work "

The deputation appeared quite satisfied with this.

5. *Time of Court* —The men asked that the Court should always be held at 8 o'clock in the morning, and they complained that they were sometimes called off duty to attend Court and consequently lost their pay.

It was agreed that the Court should always be held at 8.0 and that, in cases where men had been called off duty owing to a mistake of the Starter, if they would notify the officer holding the Court they would if their statement proved correct, receive their pay for that day

6. The men urged that whereas they had previously been allowed to sit in the cars, this privilege has been withdrawn. It was explained to them that it had been withdrawn because they had abused it by not giving up their seats to passengers when called upon to do so. We, however, agreed that we would in future allow them to sit in the cars on the last two rows of seats before 8 a.m. and after 8 p.m. and that between those hours we would allow 3 men to stand on the off side centre gangway of Bogie Cars in addition to the 3 allowed on the rear platform

This appeared to be satisfactory.

7. *Ticket Boxes.*— It was complained that Conductors were sometimes penalised for the loss of tickets which had fallen out of ticket boxes owing to their being out of repair. The deputation were unable to state any instances in support of their complaint, while in the only two cases which had come to the knowledge of the Traffic Officers the Conductors had suffered no loss. The men were informed that steps had already been taken to reduce the likelihood of tickets falling out of the boxes
8. *Clothing.*—The men wished that the Clothing Allowance should be continued in respect of time during which they were absent owing to sickness

They were informed that this was the case so long as their absence was supported by a Medical Certificate

9. The men urged that the allowance of 2 days' leave with pay in respect of each month during which they worked 29 days or over should be allowed so long as they worked 24 days. Any modification of the present rule was refused, but they were promised to have the rule re-drafted so as to make it quite clear.

10. The deputation suggested that in future the Court should only be presided over by European Officers and that no native of India should be allowed to hold Court.

They were informed that owing to the feeling which had recently been expressed against him, Mr. Pestonji had already asked to be relieved of his duties in the Court and that the Company did not propose to replace him.

11. The deputation stipulated that if the strikers returned to work the men who had been posted as "replaced" the previous day should be reinstated. This was refused.

On the 9th by 10 o'clock in the morning 11 Conductors and 20 Drivers came and begged to be taken again. After being severely reprimanded for striking without justification all but one were reinstated with the sacrifice of the pay for the time they had lost. The following notice was sent up to the strikers on the Maidan :—

NOTICE.

9th December, 1910.

In accordance with the Notice issued yesterday to the Conductors and Drivers on strike intimating that certain of their number had been replaced and a month's pay forfeited, notice is hereby given that a further 40 men were replaced yesterday under the same conditions.

Replacements will continue to be made until the Company's Regular Staff is made up to its full complement."

Stragglers continued to come in begging to be forgiven and taken back, their story in every case being that they had been led away by the ring-leaders. By noon another dozen had been passed in and the Deputy Commissioner of Police then telephoned to the Managing Engineer that the men wished to return to work, but that they wanted those who had been replaced to be taken back. The men were, however, informed that their best course was to waive this point and for the remainder to go to the Management before it was too late.

A couple of hours afterwards men began to come in rapidly and by 2-30 P.M. there was a large number ready for examination. By 4 o'clock it was evident that the troubles

were over and the full Traffic Schedule was established in the evening. The attitude of the men was penitent and subdued and they were anxious to be taken back under any conditions the Company liked.

The strike lasted for four days and naturally put the Company to considerable loss and inconvenience, and our traffic returns against a probable average of at least Rs. 6,500 per day were :—

			Rs.
Tuesday 6th	..	..	4,443
Wednesday 7th	..	..	4,482
Thursday 8th	..	..	4,700
Friday 9th	..	..	4,919

In addition to the loss of revenue we had a good deal of damage to Rolling-Stock owing to inexperienced driving. Great dislocation of other Departments was naturally caused by the call made on the personnel to replace the regular men, but every man worked with a will to minimise inconvenience to the public and to keep things going for the reputation of the Company.

About 10 per cent. of the men were replaced by new blood thereby forfeiting a month's pay. The rest of the men lost 4 days' pay and had a very unsatisfactory time of it.

The Managing Engineer rewarded the volunteers and also those Conductors and Drivers who had remained loyal. He authorised the payment of double pay to the employees of other Departments in respect of the time they worked for the Traffic Department during the trouble. He also proposed to give a "loyalty medal" to each of the Conductors and Drivers about 30 in number who had remained loyal throughout, these medals to carry a special pay of Rs. 3/- per month in addition to the grade pay in each case.

In the case of Traffic Inspectors, Starters, etc., who worked through the strike, he paid them overtime for the extra hours they worked.

Allowing for these grants, the estimate of the approximate financial effect of the strike was as follows :—

	Rs.	Rs.
<i>Loss—</i>		
(1) Estimated loss in gross receipt ..	6,300	
(2) Cost of employment of temporary staff including Bonus	1,600	
(3) Bonus and Overtime to Traffic Staff	700	
(4) Collisions and damage over and above normal due to inexperienced driving	650	
(5) Shortage of cash owing to inexperienced Conductors	150	
(6) Sundry Expenses	150	
Total ..		9,550
<i>Gain—</i>		
(1) Estimated saving in Power and Conductors and Drivers wages owing to lessened car mileage ..	3,700	
(2) Wages of discharged strikers forfeited	1,340	
(3) Deposits of discharged strikers forfeited	430	
Total ..		5,470
Net loss due to strike ..		4,080

Against this loss it was to be borne in mind that a number of men in the highest and intermediate grades of pay were replaced by new men on the lowest grade, the total difference in grade rates being about Rs. 300/- a month, so that it was thought that by the end of next year we should very nearly cancel out our losses.

In addition to 49 Conductors and 31 Drivers, who were discharged during the strike, 62 Conductors and 37 Drivers failed to return to work, so that roughly 180 men had to be replaced. 61 of these vacancies were filled by old men having good records. In the cases of the discharged men they lost their pay for November, while in the case of men who failed to return they lost their pay from 1st November to 6th December so that it was estimated that the strikers were penalised to the extent of Rs. 3,000 to Rs. 3,500.

When the Directors knew the facts they were unanimous in expressing their sympathy with the Managing Engineer in the very difficult situation with which he was confronted, and their cordial congratulations were tendered to him for the manner in which he had dealt with it and the steps he had taken to minimise as far as possible the inconvenience occasioned to the travelling public.

1916.

The Managing Director sanctioned that from the 1st October, 1916, all Conductors against whom no complaints had been received of (a) failing to collect fares, (b) rudeness to passengers, should after enquiry in the Traffic Court receive each month, in addition to their fixed scale of pay a good conduct bonus of Rupee One.

He also sanctioned that from the same date all Drivers against whom no reports had been received of collisions with other vehicles or with the Company's cars, or accidents to persons, in the case of either of which the Driver was found to be at fault, should similarly receive each month a good conduct bonus of Rupee One in addition to his regular pay.

Absence from duty in any month from any cause for a period exceeding in the aggregate five days should disqualify both Conductors and Drivers from receiving this good conduct bonus.

1917

About July-August, 1917, the Company's Drivers petitioned for an increase in the scale of their pay. The Board confirmed the Managing Director's action in increasing the wages of these men as under:—

<i>From</i>	<i>To</i>
Rs. 17 per month 1st 2 years.	Rs. 19 per month 1st 2 years.
Rs. 20 per month 2nd to 5th year.	Rs. 22 per month 2nd to 5th year.
Rs. 25 per month after 5 years.	Rs. 25 per month 5th to 10th year.
	Rs. 28 per month after 10 years.

A deputation of Conductors again approached the Traffic Manager in the month of August with various petitions

concerning the improvement of their terms of service. The most important of their requests were :—

- (1) Increase in the grades of pay.
- (2) Relief from increased cost of their uniforms.
- (3) Reduction in their hours of work.

(Note.—At this time, Conductors worked 9 hours a day and Drivers 8 hours a day.)

- (4) A lavatory, eating house and water at Dadar Terminus.

The general situation with regard to Conductors at the time was as follows : There was no shortage and we had 44 recruits in training. They all, as well as Drivers, executed when joining the service a stamped agreement with the Company by which they agreed in the event of their striking work except on one month's notice to forfeit all wages and other monies (including Provident Fund, deposit, etc.) due to them by the Company.

The Managing Director wrote as follows :—

“ In considering these I think the following facts should be given due weight : (a) the cost of living has undoubtedly increased since the war ; (b) their work at the present time has become more exacting owing to the overcrowding of cars, at many hours of the day, due to shortage of rolling-stock

“ After fully discussing the matter with the Traffic Manager and with Mr. Pestonji, my feeling is that the joining pay is on the low side especially when it is remembered that it is decreased by deductions for Provident Fund, for clothing, for fines, etc. On the other hand there are reasons to suspect that it is in many cases augmented by a certain amount of pilfering the opportunities for which arise from the inefficiency and carelessness of the class of men we have to rely upon for Inspectors. I also think that the figures submitted by the Traffic Manager clearly show that the present allowance for clothing is quite inadequate in view of the great rise in the cost of uniforms.”

After discussing the matter with other Directors, the Managing Director sanctioned the following new regulations to take effect from 1st September 1917 :—

- (1) The commencing pay of Conductors for the first two years of their service to be increased from Rs. 20 to Rs. 21 per month.
- (2) The working hours of Conductors to be reduced from 9 hours to 8½ hours per day.

- (3) Instead of Conductors and Drivers making a monthly contribution of Re. 1 towards the cost of their uniforms, the Company to provide them with uniforms free of cost on the following scale .—

To Conductors.—Two khaki suits on joining. One khaki suit at the end of each subsequent six months.

To Drivers.—Two khaki suits on joining. One khaki suit at the end of each subsequent six months and one rain coat each alternate year at the beginning of monsoon

To Inspectors, Starters, and Traffic Regulators whose pay was less than Rs. 45 per month.

The same free clothing as drivers.

1918.

The following revised scale of pay for Conductors and Drivers came into force from 1st February 1918 .—

	Conductors			Drivers		
	Rs	a	p	Rs	a	p
1st year of service	22	0	0	21	0	0
2nd do	22	0	0	21	0	0
3rd do	25	0	0	23	0	0
4th do	25	0	0	23	0	0
5th do	25	0	0	25	0	0
6th do	30	0	0	30	0	0

Good Conduct badges, leave allowances, and bucksheesh to continue as heretofore.

1919.

On the 12th December, 1918, 'A' Class Inspectors and 'A' Class Traffic Regulators sent in a petition. The following reply was given to them by the Managing Director on the 14th January, 1919 :—

" Their uniforms will in future be provided to them free of cost from the 1st instant.

" They cannot be granted 10 days' leave on full pay in addition to two days monthly extra pay. If they wish to give up the latter they can have the former instead of it. Running Shed Foremen are not paid extra for work on Sundays.

" Orders have been issued that the pay of 'A' Class Inspectors and Regulators be paid monthly on the 12th day of each month or on the 13th day of each month if the 12th be a Sunday.

" You are already in receipt of a Special War Allowance and no further allowances can be sanctioned."

In January 1919 the Managing Director received a statement of various matters connected with the terms of Conductors' and Drivers' service for his consideration and his reply to it was as follows :—(23-1-1919).

“ Pay and Allowances.—A notice was issued to the Company's employees yesterday evening informing them of the additional allowances sanctioned by the Directors because of the further recent rise in the cost of grain. With the additional 15 per cent. allowance now granted the Company's Conductors and Drivers are now receiving double the wages paid to Conductors and Drivers of the Calcutta Tramways Company, and in many cases double the wages they were receiving before the war. The Managing Director has decided that the pay of both Conductors and Drivers shall be increased to Rs. 35 per month after 3 years' service exclusive of any allowances they may be in receipt of.

Bonus.—All the Company's employees received a bonus of one month's pay last year and the year before and it is the intention of the Directors that a similar bonus be granted to them this year. Three additional days' pay will be granted to them in respect of the three days' holiday in honour of the Armistic during which they worked.

Fines for Absence without Leave.—The Managing Director is willing that in future one day's wages should be cut in addition to the wages of the day they are absent without leave instead of two days' wages as formerly. Conductors and Drivers who are frequently absent without leave will not be retained in the Company's service.

Leave with Pay—All Conductors and Drivers are now granted two days' leave with pay each month if they wish to take it. This makes 24 days' leave with pay each year. Each Conductor and Driver will in future be granted seven days' leave on full pay annually. They cannot be granted leave on Sundays.

Clothing.—Conductors who wish to wear them will in future be granted one monsoon suit each two years free of cost. They must notify the Court Clerk that they wish such suits granted them not later than the 1st April.

Police Prosecution.—All the Company's employees whatever their employment will be liable to prosecution, like everyone else, if they commit offences against the Penal Code. If they do not commit such offences they need have no fear of being prosecuted.

Overcrowding on Cars.—Now that the war is over this overcrowding will be put an end to. Prohibition for more than 3 persons to stand on car platforms will be issued shortly.

Brakes on new Cars.—This matter will receive attention. The brakes are the same as on thousands of cars in service in America, but if the Drivers cannot learn to work them properly the handles will be changed.

Hours of Work.—The hours of work fixed for Conductors and Drivers, namely 8½ and 8 hours respectively, are much shorter than those worked by other employees in Bombay and in other countries. The Mill hands in Bombay work from 11 to 12 hours. All Conductors who wish can have their hours divided into two shifts with an interval of some hours between the shifts.

The Company's Directors have shown their willingness to carefully consider and to relieve all hardships from which the Company's employees are now suffering. Conductors and Drivers are warned that if they cease work without giving the Company one month's notice they will not only show their ingratitude to the Managing Director for the wish he always shows that they should be well and justly treated but forfeit any wages or other monies due to them from the Company."

1920.

In the beginning of January, 1920, the Company's Conductors and Drivers held a meeting with a view to considering and formulating their alleged grievances. The meeting was attended by about 300-400 men out of a total of about 1,500 Conductors and Drivers employed by the Company. A Conductor acted as spokesman and submitted for approval various complaints to be addressed to the Management. A list of these appeared in the newspapers also, but some of those which so appeared were not adopted by the meeting. Several of the complaints were obviously absurd, as for example that Conductors should not be prosecuted for cheating and that complaints of passengers against their conduct should not be listened to.

The Managing Director, seeing a cloud looming on the horizon, put up the following Notice on the 8th January, 1920 :—

" NOTICE TO CONDUCTORS AND DRIVERS."

8th January, 1920.

" Since his return to Bombay the Managing Director has been making enquiries into the prices of food and other necessities of living as they were when a special allowance was granted in January of last year and as they are now. The result of these enquiries will be placed before the Company's Directors at their Meeting next Wednesday and after that Meeting a Notice will be issued to Conductors and Drivers before the end of next week notifying to them the Directors' decision as to their rates of pay, hours of work, etc.

" The Directors have already decided to build more chawls for housing the Company's Conductors and Drivers and the necessary land for this purpose is now being acquired."

As promised in the above Notice, the Directors decided as follows :—

" 1. All Conductors and Drivers shall receive an increase of Rupees five per month in each grade of their pay which will make, inclusive of the increased famine allowance they will consequently draw, an increase to each grade of Rs. 6-4 per month. Their rates of pay, inclusive of famine allowance, will then stand as under :—

					<i>Conductors</i>	<i>Drivers.</i>
					Rs. a p	Rs. a p.
1st 2 years	..	..	..	..	33 12 0	32 8 0
3rd year	..	..	..	..	37 8 0	35 0 0
4th year	..	..	..	..	50 0 0	50 0 0

The present good conduct badges and allowances will be continued.

2. Increases of pay equal to the above will be granted to Inspectors and Starters, and the case of Traffic Controllers, Pointsmen, etc., will also be favourably considered by the Traffic Manager and a Notice as to their revised rates of pay issued.

3 The Company will in future allow three free uniforms to Conductors and Drivers each year instead of two free uniforms as at present

4 The limit of deficiencies in Conductors' cash receipts which are not doubled when charged against their pay will be raised from Rupee one to Rupees three per month.

5 The fines levied on Drivers for the cost of repairing damages to their cars caused by collisions due to careless driving on their part will in future be 10 per cent of the cost of those repairs limited to a total charge on their wages not exceeding Rupees ten in any one accident case instead of a charge without limit as heretofore.

6 Conductors' and Drivers' wages for the previous month will whenever possible be paid on the 12th of the following month instead of on the 15th as at present "

The above provisions came into effect from 1st January, 1920.

On 1st October, 1920, out of the 1,600 Conductors and Drivers, about 400 men assembled at the Colaba Depot and forwarded an application to the Management, the gist of which was as follows :—

- 1 Conductors and Drivers should start on Rs 40 per month.
2. They should receive Rs. 50 per month in the second year and Rs 60 in the third year.

- 3 War allowance should be on the same basis as was granted to the Mill employees in the Cotton Mills in Bombay with retrospective effect from January 1920
- 4 Bonus to be paid in the month of March instead of June
- 5 Privilege leave should be allowed for 40 days in a year
- 6 They should not be prosecuted for cheating

The Board after carefully considering this application felt bound to reject it on the ground that in January of the same year their pay was increased on a liberal scale. They, however, raised the regular attendance monthly bonus from Re 1 to Rs. 5

Before we proceed further it is essential to note the rates of pay of Conductors and Drivers existing in October, 1920. These are set out below, showing also the percentage increase over the pre war period

DRIVERS

Year	Grade and Period 1914	Grade and Period 1920	25% Grm Allowance	Total	Per cent increase over pre war period
	Rs	Rs	Rs + p	Rs + p	
1	17	26	6 8 0	32 8 0	91.18
2	17	26	6 8 0	32 8 0	91.18
3	20	28	7 0 0	35 0 0	75.00
4	20	40	10 0 0	50 0 0	150.00
5	20	40	10 0 0	50 0 0	150.00
6	25	40	10 0 0	50 0 0	100.00

CONDUCTORS

1	20	27	6 12 0	33 12 0	68.75
2	20	27	6 12 0	33 12 0	68.75
3	25	30	7 8 0	37 8 0	50.00
4	25	40	10 0 0	50 0 0	100.00
5	25	40	10 0 0	50 0 0	100.00
6	30	40	10 0 0	50 0 0	66.66

In addition, the following improvements were in existence at the time :—

Monthly Bonus of Re 1 for regular attendance and satisfactory work

Free Clothing issued on a liberal scale

Annual Bonus of one month's pay

Provident Fund contributions of one month's pay a year.

Hours Reduced from 9 to 8½ Conductors. Drivers' hours 8 per diem.

Leave on Full pay increased from 24 to 31 days in each year.

Free Medical Attendance.

Free Travelling over the Company's System.

Absenteeism.—Although the working hours were short and the leave terms liberal, the measure of absenteeism was prodigious. The Conductors and Drivers worked on an average little more than half the time. The following were the figures :—

January to August 1920.

Conductors.—

Number of Conductors on the Roll	..	1,005
Number of working Days	.. ..	244
Average Number of days worked by each		
Conductor on the Roll	.. ..	133 days = 54.5%

Drivers.—

Number of Drivers on the Roll	.. ..	623
Number of Working Days	.. ..	244
Average Number of days worked by each		
Driver on the Roll	.. ..	141 days = 58.00%

It was thought that the Conductors and Drivers would increase their pay nearly 25 per cent. if they worked three-quarters of the year. To give them an incentive to do so, the Management as stated above increased the Bonus for Regular Attendance and efficient work to Rs. 5/- a month.

A Strike.—Every Conductor and Driver on joining the service signed this guarantee :—

" I agree not to resign my position or leave the service of the Company without first giving the said Company thirty days' notice, and then not before the period of one year has elapsed since joining ; such notice to be made in writing. On my failure to comply with this condition I agree to forfeit to the Company all the wages accrued to me and all money otherwise due to me from the Company."

The Board's reply to the petition of the men for increased pay, etc., was posted at the various Depots on the night of the 6th October, 1920. On the following morning (7-10-1920) about 250 men principally from Kingsway and Byculia Depots congregated at Colaba. They created a great deal of trouble at this Depot trying to intimidate the loyal workers. The Police eventually arrested 5 of them and marched the rest

off to the Maidan. The Company was able to get most of the cars out from Colaba, Byculla and Tardeo Depots. As all the Kingsway men as well as the Workshop people had gone on strike, no cars were run out of that Depot, neither was any service run North of Connaught Road Siding as it was not considered safe to do so. Some of the Conductors and Drivers were badly assaulted by the strikers especially at Byculla and on the Kalbadevi Line. In many cases they became so nervous that it was only with difficulty that they were persuaded to carry on. All the cars were run in by 7 p. m.

Thus began the strike of our Conductors and Drivers. They were joined by the employees of our Kingsway Workshop. It was not the only strike in the City. The strike fever so to say was in full swing in Bombay at the time. The Municipal sweepers went on strike followed by Oil Companies' men. No sooner were these settled then the Postmen and Gas Company's men were out. The infection, it seems, caught hold of our Conductors and Drivers, also with the result that they formulated some absurd demands and failing therein struck work.

On the morning of the 8th October, 1920, with the exception of about 35 men, all the Conductors and Drivers failed to put in an appearance. It was with the help of Inspectors, Colaba Workshop men, Clerks, etc., that the Acting Traffic Manager, Mr. H. C. Quinn, was able to turn out 100 cars maintaining a fairly regular service on the Tardeo-Kalbadevi and Clare Road Sections. No cars were run on Jacob Circle, Mazagon, Wari Bunder and Sandhurst Road Sections. The Commissioner of Police requested that the service so far as possible should be restricted to the main lines only, as owing to the Police force being understaffed he could not possibly picket so large an area.

All transfer tickets were for the time being cancelled and only one anna direct ticket was available for the car of issue. As there was no street lighting owing to the Gas Company's men being on strike, it was considered advisable not to run the cars after dark.

Despite the intimidation to which the men were subjected and energy displayed by the leaders of the so called Tramway Workers' Union in enticing as many men as possible to remain on strike, the Company was able to maintain on an average about 80 per cent. of the daily schedule running. A

large amount of revenue was lost through the Company having employed many men unaccustomed to collection of fares. Also there was a considerable leakage through many passengers travelling free. There was a great deal of trouble on the line through the men being assaulted, cars damaged, etc. On that account, the cars on the Jacob Circle Line and on the section of line between Dadar and Victoria Gardens were stopped. On the 13th, the Cruickshank Road siding points were tampered with evidently by one of the strikers and a serious collision resulted, one passenger being slightly injured. The lever controlling these points were therefore locked. Three Conductors and one Driver were fined Rs. 50/- each for obstructing traffic at Colaba on the morning of the 7th, and a Kingsway Workshop man was fined Rs. 20/- for stoning the tram-cars.

On the 13th, while the strike was at its height, Mr. V. M. Pawar, Secretary, The Bombay Electric Supply & Tramway Workers' Union, wrote to the Company on behalf of the Chief Delegates Committee of the Union putting forward the following demands of the Tramway Workers on strike :—

DRIVERS AND CONDUCTORS.

1. No one participating in the strike should be victimised merely because he participated.
2. The pay grades should be from Rs. 35-37 —40 and 50.
3. Privilege leave every year of fifteen days.
4. Four holidays in a month, leave or double pay on gazetted Hindoo and Moslem holidays
5. House rent allowance of Rs. 10 per month.
6. No man should be placed before a Police Magistrate, unless he is found guilty by a Board of Arbitrators representative of both Company and Union. No fine should be levied until the men's case has been properly investigated.
7. Pay should be given on the tenth of every month.
8. Bonus should be paid in January instead of May.
9. Allowance of 25 per cent. as before on new scale of wages.
10. Working hours to be 8½ as before but no waiting before or after. Overtime if employed after duty hours.

WORKSHOP WORKERS' DEMANDS.

1. Same as Conductors demands as above number one.
2. Same as number nine above.
3. Same as number four above.
4. Same as number eight above.

5. One month's privilege leave every year.
6. The main gate at the Workshop not to be closed unless all those present there at 8 o'clock sharp are admitted
7. An annual increment of 4 annas and 8 annas on workers' daily wages—4 annas for those below the grade of assistants and 8 annas for Kamgars "

On the 14th, the Traffic Superintendent put up the following notice :—

" The Conductors and Drivers who have absented themselves from duty since the 7th instant will be paid their September wages on Saturday, the 16th instant at their respective Depots between 12-30 noon and 4-30 p m.

" Conductors and Drivers who do not report themselves for duty on Monday, the 18th instant will be taken as having left the Company's service without giving due notice and will be replaced."

The following were the demands put forth by Mr Pawar in his letter of the 19th October on behalf of Inspectors, Starters, Regulators and Memo Clerks, for revision of their scale of wages :—

1. ' A ' Class Inspectors and Regulators should have Rs. 75 80 90
2. ' B ' Class Inspectors, Regulators and Starters should have Rs. 55-65-70
3. Ticket Memo Clerks should have Rs. 40 50 55

Thereafter on the 22nd October, 1920, the Acting Traffic Manager issued the following two notices :

" *THE B. E. S. & T. Co., LTD.*

NOTICE

Notice is hereby given that all employees of the Company who absented themselves without leave prior to the 19th instant having failed to resume their duties on the 18th instant as required by the notice dated the 14th instant over the signature of the Acting Traffic Manager, are hereby dismissed from the service of the Company. Those employees who return the property of the Company on the 28th instant will be paid their wages for the number of days they worked in October. Failure to return that property by the date mentioned will entail forfeiture of those wages and render the men liable to prosecution for wrongful detention of the Company's property.

Dated this 22nd day of October, 1920

By Order

H. C. QUINN,

Acting Traffic Manager."

"THE B. E. S. & T. CO., LTD.

NOTICE.

Notice is hereby given that all employees of the Company who absented themselves without leave on and after the 20th instant are hereby dismissed from the service of the Company. Those employees who return the property of the Company on the 28th instant will be paid their wages for the number of days they worked in October. Failure to return that property by the date mentioned will entail forfeiture of those wages and render the men liable to prosecution for wrongful detention of the Company's property.

Dated this 22nd day of October, 1920.

By Order

H. C. QUINN,

Acting Traffic Manager."

On the 18th October, a letter was addressed by the Acting Manager, Mr. P. D. Mahaluxmivala, to the Municipal Commissioner narrating the facts of the strike and requesting him to bring them to the notice of the Corporation with a view to enlisting their support in and approval of the measures taken by the Company to maintain the tramway service. The Commissioner informed the Acting Manager by his letter of the 13th November, 1920, that the Corporation approved of the measures taken by the Company to cope with the public demand for the tramway service. The letter was addressed by the Acting Manager to the Commissioner as the agitators were trying to force the Corporation to intervene, although Clause 26 of the Deed of Concession, which runs as follows, gave us ample protection :—

Clause 26 of the Deed of Concession :—

"The B. E. S. T. Company shall not be liable for breach of any covenant agreement or stipulation herein contained which may inevitably be caused by reason of any strike or combination of workmen or any riot or commotion or by the outbreak of hostilities of war the Act of God or unavoidable accident or any other circumstance beyond the control of the B. E. S. T. Company (exclusive of the want of funds) and no such breach shall be deemed a default on the part of the B. E. S. T. Company."

The following is the list of our employees who were assaulted up to 27th October:—

7th October 1920	20	Conductors and Drivers
8th " "	4	" " "
10th " "	1	Driver
12th " "	1	Conductor.
13th " "	1	"
16th " "	2	Conductors.
19th " "	1	Driver.
20th " "	1	"
23rd " "	27	Conductors and Drivers
24th " "	7	" " "
25th " "	{ 6	" " "
	{ 1	'A' Class Inspector
26th " "	30	Conductors and Drivers
27th " "	1	Conductor.

Total 103

The actual position of the Conductors and Drivers on the 3rd November was as under:—

						Conductors	Drivers.
Working	..	..	..	..	..	205	237
Re-engaged	..	..	..	..	..	82	47
In school	..	..	..	..	..	212	132
Sick	..	..	..	..	..	32	41
On leave	..	..	..	..	..	70	57
Absent	..	..	..	..	..	101	50
						702	564
Engaged to day	..	..	..	..	..	41	44
Strikers	..	..	..	..	..	565	180
Total number of employees before the strike	..	..	..	..	..	1,050	708

The strike continued for full 45 days, and came to an end on the 21st November. Both the Traffic and Workshop men returned to work unconditionally. The Board agreed that the Management would see a deputation of 12 men of the strikers. This they did on Friday, the 19th November, 1920. Mr. C. Lucas, the Traffic Manager, explained to them that the Board of Directors had decided to grant their request of reinstating them and to overlook

their dereliction of duty. They would, therefore, be all reinstated in their old positions, excepting those men who had been legally convicted of assaults on the men who had been working during the strike. The only punishment the Board would inflict would be the loss of wages they had incurred through not working. In treating them in this manner, Mr. Lucas continued, the Board were dealing with them most leniently and it was incumbent on all of them to respond to that kind treatment by working loyally and honestly in the future. As regards Rs. 5/- bonus for regular attendance and leave, the Board had resolved as follows :—

“ That the Management be authorised to inform any deputation not exceeding 12 of the strikers which may wait upon them that the Board adhere to their offer of Rs 5 a month bonus for regular attendance regular attendance to be 6 days a week, or any leave on medical certificate or leave with permission not exceeding 7 days in all per month. Working days to be six per week ”

The deputation replied that those were the same terms that were offered before and all the men were aware of them. Could nothing more be granted, they asked ? Mr. Lucas said that nothing more could be granted. He added that they would remember that they had come there to be reinstated and were not there to bargain. The men thereupon showed their willingness to come back. However, they requested that those men who were on trial or had been convicted be taken back. This was refused.

The following is the comparative statement showing the demands of the strikers and the terms offered to them by the Board :—

<i>Conductors and Drivers demands before going on strike.</i>	<i>Company's offer before going on strike</i>
1. Drivers and Conductors should start on Rs 40 per month.	To give the Conductors and Drivers an incentive to be more regular, the Management will increase the bonus for regular attendance and efficient work from Re 1 per month to Rs 5 per month
2. They should receive Rs. 50 per month in the second year and Rs 60 in the third year	
3. War Allowance should be on the same basis as is granted to the Mill employees in the Cotton Mills in Bombay and with retrospective effect from January 1920.	

*Conductors and Drivers demand
before going on strike*

- 4 Bonus to be paid in the month of March instead of June
- 5 Privilege leave should be allowed for 40 days in a year
- 6 Not to be prosecuted.

*Men's demands after going on strike Condition in which the strikers
returned to work*

- | | |
|---|---|
| <ol style="list-style-type: none"> 1 No one participating in the strike should be victimised merely because he participated 2 The pay grades should be from Rs. 35 37 40 and 50 3 Privilege leave every year of fifteen days 4 Four holidays in a month leave or double pay on GAZETTED Hindoo and Moslem Holidays 5 House rent allowance of Rs. 10 per month 6 No man should be placed before a magistrate unless he is found guilty by a Board of Arbitrators representative of both Company and Union. No fine should be levied until the men's case has been properly investigated 7 Pay should be given on the 10th of every month 8 Bonus should be paid in January instead of May 9 Allowance of 25 per cent. as before on new scale of wages 10 Working hours to be 8½ as before but no waiting before or after Overtime if employed after duty hours | <p>The Board adhere to their offer of Rs. 5 a month bonus for regular attendance regular attendance to be 6 days a week or any leave on medical certificate or leave with permission not exceeding 7 days in all per month. Working days to be six per week</p> |
|---|---|

A statement of rates of pay, allowances, etc., given to the Conductors and Drivers from 1913 up to 30th September, 1920, is appended.

DRIVERS.

Year.	Grade and Period	Grade and Period	Grade and Period	Grade and Period	25% Grain Allowance.	Total.	Per cent. increase over 1913.
	1913 to May 1917.	June 1917 to Jan. 1918	Feb 1918 to Dec 1918	Jan 1919 to Dec 1919	Jan 1920 to 30th Sept		
	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	Rs a p	
1	17 0 0	19 0 0	21 0 0	21 0 0	26 0 0	32 8 0	91.18
2	17 0 0	19 0 0	21 0 0	21 0 0	26 0 0	32 8 0	91.18
3	20 0 0	22 0 0	23 0 0	23 0 0	28 0 0	35 0 0	75.00
4	20 0 0	22 0 0	23 0 0	23 0 0	40 0 0	50 0 0	150.00
5	20 0 0	22 0 0	25 0 0	25 0 0	40 0 0	50 0 0	150.00
6	25 0 0	25 0 0	30 0 0	35 0 0	40 0 0	50 0 0	100.00
7	....	25 0 0	....	....	....	....	....
8	....	25 0 0	....	....	....	....	....
9	....	25 0 0	....	....	....	....	....
10	....	25 0 0	....	....	....	....	....
11	....	28 0 0	....	....	....	....	....

CONDUCTORS.

Year.	Grade and Period	Grade and Period	Grade and Period	Grade and Period	Grade and Period	25% Grain Allowance.	Total.	Per cent. increase over 1913.
	1913 to Aug 1917 Rs a p.	Sept 1917 to Jan 1918 Rs. a p.	Feb 1918 to Dec 1918 Rs. a p.	Jan 1919 to Dec 1919 Rs. a p.	Jan 1920 to 30th Sept Rs. a p.			
1	20 0 0	21 0 0	22 0 0	22 0 0	27 0 0	Rs a p 6 12 0	Rs a p 33 12 0	68.75
2	20 0 0	21 0 0	22 0 0	22 0 0	27 0 0	6 12 0	33 12 0	68.75
3	25 0 0	25 0 0	25 0 0	25 0 0	30 0 0	7 8 0	37 8 0	50.00
4	25 0 0	25 0 0	25 0 0	25 0 0	40 0 0	10 0 0	50 0 0	100.00
5	25 0 0	25 0 0	25 0 0	25 0 0	40 0 0	10 0 0	50 0 0	100.00
6	30 0 0	30 0 0	30 0 0	35 0 0	40 0 0	10 0 0	50 0 0	66.66

ALLOWANCES AND CONVEYANCES.

September 1st, 1916 Re 1 given monthly for regular attendance and satisfactory work

September 1st, 1917 Free clothing issued 3 Khaki suits yearly; Drivers and Conductors One monsoon suit every two years to Conductors and one monsoon coat every three years to Drivers One Pugree and one pair putties every 6 months Previously Company credited to each man's account Rs. 12 per annum

October 1st, 1918 100% Grain Allowance

January 1st, 1919 25% Grain Allowance

May 1917. Bonus of one month's salary given

September 1st, 1917 Conductors' working hours reduced from 9 to 8 Drivers' remaining the same viz., 8 hours.

Anything above these hours the men are paid at the rate of time and a quarter

January 1st, 1919 Leave on full pay increased from 24 to 31 days in each year

After the strike was over, the Board passed the following Resolution on 24th November, 1920 :—

“ No 1334 *Conductors' and Drivers' Strike.*

“ *RESOLVED* that rewards be paid to the loyal men who remained faithful during the strike as under :—

- (a) *Inspectors, Starters, etc* One month's pay
- (b) *Conductors and Drivers* One and a half month's pay.

The above should apply to all men not absent during the strike for more days than 1 in 7 Those absent for more than this up to 14 days should receive in proportion to the number of days put in

“ Further that the Rs 5/- per month bonus for Regular Attendance be subject to the increase of 25 per cent. allowance.

“ *RESOLVED* that the Directors desire to place on record their high appreciation of the skill, courage and address with which the staff met the difficult situation created by the strike, and in particular of the services of Mr Mahaluxmivala and Mr Quinn and desire that this expression of their appreciation shall be conveyed to all members of the staff ”

The Board also sanctioned the following rewards to be given to the workmen employed in the Kingsway Workshops who remained loyal during the strike :—

- (1) Men who worked continuously during the whole period : double pay and a gratuity of Rs 15 - per man
- (2) Men who worked for 50 per cent of the period but not continuously throughout : double pay for each day worked

1921.

The following Notice was issued on the 17th January, 1921 :—

NOTICE

“ The Managing Director having had brought to his notice representations received from the Conductors and Drivers regarding

- (a) The method of calculating the wages of Conductors and Drivers on the Extra List,
- (b) The present scale of fines and deductions for absence without leave ;

has issued the following orders :—

- (1) That those men who desire to work on their four monthly leave days shall be allowed to do so when there is work available for them, and so given the opportunity of earning additional

wages on those days There were formerly two leave days each month with pay when work was optional with the men There will in future be four of these days

(2) Men on the Extra List who work on service cars shall in future receive a full day's pay even if the cars they work on do not run sufficient hours to entitle them to a full day's pay and provided that sufficient work on some other car cannot be given to them on that day to make up their shortage of work

(3) The penalty imposed on Conductors and Drivers for absence without leave shall in future be restricted to

- (a) Loss of the monthly bonus of Rs 5 given by the Company to men for regular attendance except on leave days,
- (b) Loss of pay for all days of absence without leave,
- (c) And in addition loss of one monthly leave day's pay for each day's absence without leave

The above new orders will be made to apply to the Conductors' and Drivers' paysheets from 1st December last, and the December paysheets revised accordingly

If any Conductor or Driver does not understand the meaning of the above rule they will be explained to him by the Traffic Superintendent or Accident Officer

On the 9th June, 1921, a letter written by the Secretary of the Conductors' and Drivers' Union was presented to Mr. Lucas by some 50 or 60 Conductors The demands made by them and the reply given to each of these demands are enumerated below in parallel columns

<i>Conductors' and Drivers' demand dated 9th June, 1921</i>	<i>Reply given by the Traffic Manager dated 9th June, 1921</i>
---	--

- | | |
|--|--|
| 1 The five rupees bonus should be consolidated in our pay | 1 It was explained to them that at present about 70 per cent of the men draw this and to give it to the others who had not complied with the rules would be unfair |
| 2 Our allowance should be increased to 50 per cent on our salary instead of the 25 per cent that we are getting at present | 2 Their ground for this was that the Mills get it I explained that the Mills were able to pay 100 per cent dividends while we only paid 12 per cent. That if our receipts were so increased as to enable us to pay these huge dividends our men would have a case for higher pay |

3. The Company has already promised us 8 hours duty and 26 working days a month. We propose that on an average we should have seven hours actual duty on the cars and about an hour should be allowed for bringing and returning "bag box," etc.
4. Relievers should be arranged on all times at about 1 p.m.
5. The service cars should be lodged in such a way that there should be no waste of time in starting or closing the service.
6. Either the Company should arrange to have our subscription of our Union, deducted from our pay or send the same to our Union Office, or few of us should be given leave to collect our subscription. These collectors should not be reported against.
7. Ramchandra Bhikaji the ex-Starter No. 32 should not be obstructed in the discharge of his Union duties, as he is our official.
3. The men were informed that an all round 8 hour duty had not been promised. That the duties of Conductors were still 8½ and the Drivers 8 hours and that no change would be made in this.
4. The men were informed that as far as possible morning shift men get their relief from 1 p.m.
5. That in arranging the duties of men who get their relief or take up their duties a long way away from their depots the time it takes them to do so is included in their hours of duty.
6. No reply was given to this, but I see no reason for aiding the Union in the collection of the men's subscriptions when that Union is not officially recognised by the Company.
7. Ex-Starter 32 was one of the men sent to prison for assaulting those who wanted to work and he should not be allowed in the Company's premises.

Mr. C. N. Moberly, the Managing Engineer, announced on the 15th November that instead of the usual 7 days' pay which was granted at the end of the year to the men of the Traffic Outdoor Staff in respect of casual leave which they might have taken without pay during the year, 15 days' pay would be granted with effect from 1st January, 1921. This allowance was to be paid in January and all such men who had completed one year's service at 31st December were to draw the full amount. The proportional amount due to them was to be paid to those of under one year's service as usual.

1922.

In July, 1922, a very large proportion of Company's employees became members of their Union, known as The Bombay Tramway Union. This Union the Company was prepared to recognise on certain terms and conditions. Unfortunately certain differences arose and notwithstanding several attempts made to bring about a compromise, members of the Union served the Company with a notice through the General Secretary of the Union on the 17th July, 1922, to receive the Union's deputation to see if the matter in dispute could not be referred to arbitration; and if no satisfactory reply was received on or before the 22nd day of July a further notice was given that the members of the Union would go on strike without any intimation. To this notice no reply was given by the Company. The Conductors and Drivers therefore struck work without giving any notice on the 18th September.

On the 27th September, 1922, a notice was posted at all the Depots of the Company intimating that the Directors had resolved that all men who were on strike after Thursday, the 28th, would be dismissed from the Company's service with forfeiture of all moneys due to them except their own contributions to the Provident Fund. In accordance with the terms of this notice, those that did not return to work were dismissed on the 28th September. The Company's contributions to their Provident Fund accounts, the amount earned towards Retirement Gratuities and deposits were forfeited. As an act of grace wages earned between the 1st and 18th September were paid to those dismissed.

The strike lasted for 13 days up to the 4th October, 1922, when it came to an end, men returning to work unconditionally.

1923.

The General Manager made the following changes in the system of issuing khaki clothing and caps on the 7th September, 1923 :—

1. *Khaki Suits* —2 suits shall be issued on joining, and a third suit after 4 months service. Thereafter an additional suit shall be issued once in every 4 months *but only in exchange for an old suit.*

2. *Old Suits* surrendered in accordance with the above shall be washed by the owner and returned to Stores clean at the time of taking delivery of the new suit. Such suits shall be sold under arrangements made by Storekeeper, and the proceeds shall be credited to the Company's "Poor Box."
3. *Caps* - New issues of caps will be made as before, but an old cap must be surrendered in exchange for the 3rd and subsequent new ones. The Storekeeper will dispose of old caps in the same way as old suits.

1931.

DISPUTE IN KINGSWAY WORKSHOP.

On 3rd September, 1931, the General Manager put up a notice to the effect that in view of the general shortage of work, the workshop would be kept closed on every Monday, until further notice, but that the Workshop Superintendent would call such men to work on Mondays as might be specially required. In accordance with this notice, the Workshop was kept closed on Monday, the 21st September, and the Workshop Superintendent called only 50 men to work on that day. The Workshop men took exception to the introduction of "Short Time" and on the morning of the 21st the Tramwaymen's Union distributed Marathi leaflets exhorting the men to refrain from attending the Workshop. The officials of the Union picketed the gates of the Workshop, with the result that the 50 men detailed for work did not attend the Workshop. On the evening of the same day, the General Manager put up another notice stating that if men who would be asked to work on Monday, the 28th September, would fail to attend on that day, the entire Workshop would be closed until further notice. The Workshop Superintendent called 52 men for work on the 28th September, but the men did not attend as they were advised by the Union not to do so. On the morning of the 29th, the Company, therefore, declared a lockout against all the 512 workmen employed in the Workshop. A meeting of the workers was held at about 8-30 a.m. on that day, when the leaders of the Union exhorted the men to continue the strike until the notice regarding the closing of the Workshop on Mondays was withdrawn. A procession of about 250 strikers was then taken out from the Workshop to Congress House, where another meeting was held. The Bombay Provincial Congress Committee assured the men of its support in the dispute. On the morning of the 30th,

the gates of the Workshop were picketed by the leaders of the Union and seven volunteers. The officials of the Union tried to dissuade some of the mistries and clerks from going into the Workshop, but without success. At a meeting of the strikers held in the morning on the same day, the officials of the Union advised the men to carry on peaceful picketing at the Workshop during the whole day and said that if mere persuasion was of no avail, they would have to practise "satyagrah." Mr. J. M. Mehta and fifteen other Corporators also requisitioned a Special Meeting of the Bombay Municipal Corporation to discuss the strike situation, and the Municipal Secretary accordingly announced a Special Meeting of the Corporation for 8th October, 1931.

All the strikers were paid their September wages on the 7th October. On the same day, Mr. V. H. Joshi, the General Secretary of the Union, issued an appeal to the Municipal Corporators setting forth the grievances of the workers regarding recognition of the Union, rates of wages, retrenchment, insecurity of service, etc., and suggesting the Corporation to take over the Tramway concern from the Company. In a subsequent leaflet entitled "Information Bulletin" the Union published detailed information regarding the wages earned by the strikers for the month of September, 1931.

As previously announced, a special meeting of the Municipal Corporation was held at 4 p.m. on the 8th, when the following resolution was passed unanimously:

"That the Corporation understand that there has been an outstanding dispute, between the Tramwaymen and The B. E. S. & T. Co., Ltd. regarding the question of wages, recognition of the workers' Union and retrenchment by short time, and suggest to the Company to come to reasonable arrangements with them to avoid inconvenience to the city involved by any labour trouble that might arise between the Company and its workers."

Negotiations for the settlement of the dispute commenced on the 10th between the officials of the Union and the General Manager of the Company and continued for a week. Through the good offices of His Worship the Mayor of Bombay (Mr. J. B. Boman-Behram) a settlement was arrived at on the evening of the 16th October. It was agreed:—

1. *Short Time*.—The Company offered, provided the men who so desire are allowed to tender their resignations and accept retrenchment under Standing Order 36A, to reopen the

Workshops on Wednesday, October 21st. Further that the Workshops shall not be closed on Monday, October 26th, and that they shall not be closed on more than 3 Mondays in any of the following months ending on 31st March 1932. On those Mondays on which the Workshops are closed, about 50 men, so far as possible in rotation, will be called to work. The representatives of the Kingsway Workshop men gave an undertaking to advise quite openly and publicly that those workmen, who wished to leave the Company's service, should be allowed to do so.

2. *Wages*.—Dr. Chitnis requested the Company, with a view to settling disputes regarding the rates of wages paid, to reintroduce what is known as the "Efficiency Bar Table", first introduced by the Company with effect from 1st September, 1929, but withdrawn with effect from 31st January, 1930, under the Orders of the Board of Directors, at the special request of the Workmen's Deputation. He requested that, if reintroduced, Efficiency Bars should be removed from the following Designations:—

- (a) Comm. Builders.
- (b) Controller Hands.
- (c) Armature Winders.
- (d) Wiremen.

as originally there was nothing to prevent these Designations earning maximum rates.

The General Manager replied that he would do his utmost to effect the reintroduction of that schedule, and would consider favourably the adjustments asked for. But he would have to refer the question of reintroduction for the orders of the Board.

3. *Recognition of the Union*.—With reference to this question the General Manager stated that, at the first meeting with the representatives of the Kingsway Workshop men on 9th October in the Mayor's parlour, Mr. F. E. Dinshaw had informed Mr. Jamnadas Mehta that the Company during the cold weather will reconsider the recognition of an Union in the light of the Report of the Whitley Commission.
4. *Increments for "X" Rate Men*.—The General Manager reaffirmed the statement made by Mr. Dinshaw, when interviewing the representatives of the Congress Labour Committee on October 7th, that this question had been under the consideration of the Board of Directors, who had decided to postpone further consideration until the cold weather.
5. *Repayment of Loans*.—Mr. Joshi stated that in the cases of workmen, who had availed themselves of loans both from the Provident Fund and Employees' Welfare Fund, instalments in respect of each loan had to be repaid monthly. He therefore asked that, during the continuance of "Short Time", only one instalment shall be deducted monthly.

The General Manager said he would consider this question, but that he would extend the time for repayment during the continuance of "Short Time."

In view of the foregoing Dr. Chitnis stated that the Workshop men would commence work on Wednesday, 21st October."

Thus the lockout was lifted with effect from 21st October, 1931, and a notice to this effect was put up in the afternoon of the 17th. There was no change in the situation during the next two days. On the 20th, the strikers were advised by their leaders to resume work on the next day when the Workshop reopened. Accordingly, all the strikers resumed work on the morning of the 21st, and the dispute ended in a compromise.

As there was unfortunately no hope that the quantity of work, to be carried out in the Workshops, would increase, the Workshop Superintendent was authorised on the 28th October :—

- (a) to accept all applications from workmen for Retrenchment under S. O. 36A.
- (b) to grant applications for long leave (without pay).

It was hoped that all workmen would, who could do so, take advantage of the above opportunities, in order to reduce the amount of Short Time, which the continued shortage of work would involve.

Pursuant to the agreement reached at the meeting held in the parlour of the Mayor of Bombay on the 16th October, 1931, the General Manager with the concurrence of the Board issued the following notice to the Kingsway Workshop employees on the 31st March, 1932 :—

1. *Short Time*.—Full time working will be resumed with effect from the 1st April, 1932.
2. *Wages*.—The "Efficiency Bar Table" was reintroduced on the 1st November, 1931
3. *Recognition of the Union*.—The Company will recognise the Bombay Tramway Men's Union, provided :—
 - (a) The name of the Union is changed to "The Bombay Tramways Workshops Men's Union," as representing the Workshops Employees only ;
 - (b) The membership of the Union embraces a majority of the Workshop Employees ;
 - (c) All the officers of the Union are employees in the Kingsway Workshops.

Note.—Condition (c) is made in accordance with the opinion of The Royal Commission on Indian Labour that the Leader drawn from outside the ranks of Labour has “seldom a complete knowledge of the technical details of the industry to which his work is related, and cannot hope to meet the employer on equal terms in this respect.” The Kingsway Workshop Employees include men fully qualified to put forward and maintain any legitimate grievance in their working conditions.

4. *Increments for “X” Rate Men*—The classification “X” Rate Employees will be abolished.

All present “X” Rate Employees will be transferred to a new Table 11 in Grading Schedules, 2nd Edition.

Under this Table present “X” Rate Employees will receive the same, or higher, rates of pay than they now draw.

Those employees not drawing the new standard minimum rates will be promoted thereto.

Those employees who have been in the Company's service for two years and over, and who comply with certain specified conditions, will receive increments as set out in Table 11.

These changes will take effect on and from the 1st May, 1932.

Further, all Non-Scheduled Employees except apprentices engaged for service after 30th April, 1932, in (a) any of the Company's Engineering Departments or (b) as Omnibus Drivers, will be paid in accordance with the rates set out in Table 11

5. *Repayments of Loans*—During the continuance of “Short Time” usual instalments have been deducted in repayment of loans from the Provident Fund. Half the usual instalments in repayment of Loans from the Employees' Welfare Fund have been deducted, but usual deductions will be made from wages earned in April and following months

6. *Retrenchment.*

- (a) As there is insufficient work for the number of Carpenters on the muster roll, and an inadequate number have offered for retrenchment, the following Check Numbers, being those with the shortest service, are hereby given 1 month's notice that they will be retrenched with effect from the 30th April, 1932, in terms of Standing Order 36A :—

Check Numbers 408, 406, 391, 394, 393, 339, 341,
389, 313, 312, 311, 387, 374, 304,
366, 324, 317, 372, 370, 323.

- (b) No further applications for retrenchment, called for in the notice of 28th October, 1931, will be accepted after 31st March, 1932.”

CHAPTER 16.

Transfer of Workshops from Colaba to Kingsway.

In the year 1886 the Bombay Tramway Company, Ltd., acquired from the Secretary of State for India in Council a lease for a term of 999 years of 21,421 square yards of land on the Colaba Causeway for the purpose of erecting stables, carsheds and workshops. After the business and property of this former Company were taken over by the old B.E.S. & T. Company, Ltd., and the tramway lines electrified, the stables (with the exception of a few stalls) were abolished and the buildings, except for a portion of them used for residential purposes, used only for the purposes of carsheds and workshops.

Under the Tramways Act of 1874, no statutory protection was granted to the Company to carry on its work in the depots, workshops and other buildings erected on the land at Colaba. The Company was advised, having regard to decisions of the English Courts, that if it could be shown that it carried on works of a nature which could be proved to be a nuisance to any individual, and in respect of which it had no statutory protection, the Court would probably, if applied to, be obliged to issue an injunction to restrain such work being carried on.

It so happened that in the year 1905, Mr. Fritchley (of the firm of Gostling Fritchley & Chambers, Architects) erected a building known as "Donald House", for residential flats, on a piece of land leased by him from the Bombay Port Trust, on the Colaba Causeway opposite the Carsheds and Workshops, and he, or his transferee, subsequently sold this building to Messrs. Cowasjee Dinshaw & Brothers in whose possession it was at the time of our story in 1910-11.

In the year 1910 a Mr. A. N. Templeton, occupying one of the flats in the building, and therefore a tenant of the said Messrs. Cowasjee Dinshaw & Brothers, addressed complaints to this Company on the subject of the alleged nuisance to himself and family caused by the work of maintaining its cars carried on by the Company at its Carsheds and Workshops both by day and during a portion of the night.

In deference to the complaint the Company did everything in its power to minimise and remove the alleged nuisance,

both by carrying on as much as possible of the work complained of in the rear portion of the premises, by the substitution of copper for iron hammers, and by other measures. It was, however, obviously impossible that the Company should cease altogether its maintenance and repair work, and it was further essentially necessary for the safety of the public that all of the tramway cars at work during the day—a considerable proportion of which were housed in the Colaba Carsheds should be examined at night in respect more especially of their brakes and of portions of their electrical equipment, and that any defects found therein should be remedied before they were again put into service on the following morning.

Notwithstanding the measures taken by the Company to remove the alleged nuisance, the Company received a notice in March 1911 from the Solicitors of Messrs. Cowasjee Dinshaw & Brothers that failing the alleged nuisance being entirely remedied, which was tantamount to the Company putting a stop to all work in the said Workshops at night, they intended to forthwith apply to the High Court for an injunction to restrain the Company from carrying on the work.

The legal advice obtained in this connection as to whether or not the existing provisions of the Tramway Act gave the Company statutory authority to carry on the work of maintaining the cars, provided it was carried on without negligence, was of a somewhat uncertain character, and having regard to the dislocation of our business, and other very serious consequences which would ensue were an injunction obtained against the Company, the Company preferred to arrive at a settlement with Messrs. Cowasjee Dinshaw & Brothers, instead of taking the matter before the High Court, by entering into an agreement (12-5-1911) with them to guarantee them a certain minimum monthly sum in respect of the rentals of "Donald House" for a period of four years coupled with a further prospective conditional guarantees in certain eventualities, on consideration of which guarantees they undertook to withdraw all action against the Company and to indemnify the Company against any action on the part of their tenants in respect of the alleged nuisance. Although this Agreement terminated for the time being the very anxious situation in which the Company found itself placed in connection with the maintenance of its business of running the electrical tramways

of Bombay, it secured it no protection against similar action by other parties. It was feared that the fact of the Company having entered into the above Agreement with Messrs. Cowasjee Dinshaw & Brothers was likely, when known, to tempt others who had residences in the neighbourhood of our depots to adduce similar complaints.

In view of the difficulties and the extensions of its lines in the Northern Districts of the City, the Company contemplated the removal of the Workshops from Colaba. Before it could do so, the Company applied on the 11th May 1911 to have the Bombay Tramway Act of 1874 amended giving the Company the statutory authority, which it lacked, to hold and use the lands and the buildings erected thereon and any other buildings which might be thereafter erected thereon, as depots for the housing and storage of its carriages and as workshops for the maintenance and repair of the same and of the different parts thereon and otherwise for the proper purposes of their undertaking. The Company also asked that any lands purchased or acquired by it after that date upon which workshops or other buildings might be erected should, if approved by the Local Government and notified in the Official Gazette, also be protected likewise.

A Bill being Bill No. IX of 1912 on the above lines and embodying the Company's lands at Colaba, Foras Road and Parel Road (opposite the Victoria Gardens) was introduced in the Legislative Council and published for general information in the Government Gazette on the 24th July 1912. The Bombay Port Trust, the Bombay Improvement Trust, H. E. Rear Admiral Sir A. E. Bethell, K.C.M.G., the Revd. Mr. Edwards and certain residents of Colaba Causeway sent representations to Government criticising the terms of the Bill. A rejoinder to these representations was addressed by the Managing Director to the Government on the 15th January 1913.

After much delay, Act III of 1914 was passed by the Legislature and received the assent of the Governor-General on the 15th September 1914. The following three reservations were however inserted in the Act, *viz.*—

1. That after the 1st July 1917, the Colaba premises should not be used as workshops for heavy repairs.

2. That up to the 1st July 1917, work at Colaba premises should be restricted to hours of 8 A.M. and 8 30 P.M. and after the above date, work in the carsheds, outside of those hours, should be restricted to light and emergent repairs ;
3. That any new lands purchased and built upon for depots, and workshops should be approved by the Commissioner, given with the consent of the Corporation and sanctioned and notified by Government.

As stated, the Company was, at this time, extending its lines in the northern districts of the City. It, therefore, required Car Depots and Repairing Shops near those places. Consequently, it contemplated erecting new Carsheds and Workshops in the neighbourhood of Vincent Road and negotiated with the Bombay Improvement Trust with a view to the acquisition of land there for that purpose. It also intended to transfer there the Workshops then located at Colaba Causeway.

With this end in view, the Company entered into an Agreement with the Bombay Improvement Trust to take on lease for a period of 999 years from the 30th June 1915 a piece of land containing a total area of 42,889 square yards situated on the Dadar-Matunga Plot No. 720D at Kingsway and built the present Workshop at the place.

The necessary approval of the Commissioner with the consent of the Corporation was obtained for the erection of Company's Depot, Workshop, and other buildings on the land mentioned above and was sanctioned by Government under Section 4.A of the Bombay Tramways Act.

PART III.

SUPPLY.

CHAPTER 17.

Wari Bunder and Kussara Power House Lands.

By an Indenture dated the 13th June 1905, the Brush Electrical Engineering Co., Ltd., took on lease a plot of land admeasuring 16,809 square yards situated on the Santa Cruz Port Trust Estate (commonly known as the Wari Bunder Land) from the 1st March 1905 for a term of fifty years for the purpose of erecting an Electrical Generating Power House at the following rent from the Bombay Port Trust :—

Rs. 875-7-6 for the first 20 years.

Rs. 1,400-12-0 for the remaining 30 years.

On the 15th December 1905, this piece of land with all the messuages and premises comprised therein was with the consent of the Trustees of the Port of Bombay assigned by the Brush Electrical Engineering Co., Ltd., to the Bombay Electric Supply & Tramways Co., Ltd., which was incorporated in London in the same year.

A Generating Station was then built upon this land.

In October 1907, 4,300 K.W. of generating plant and about 3,200 K.W. Boiler plant were installed in the above Power House. The estimated load required by the Company from this Generating Station in 1908, 1909 and 1910 was as follows :—

—	April 1908	April 1909	January 1910.
Lighting & Fan Load ..	1,100 K W	1,550 K W	1,900 K W.
Traction Load	1,320 ..	1,820 ..	2,070 ..
Power Load	250 ..	550 ..	800 ..
Add 25% Reserve on the total of the above 3 items	670 ..	980 ..	1,190 ..
Total installed plant at ..	3,340 K W	4,900 K W	5,960 K.W.

It will be seen from above that we had sufficient plant installed to carry us up to 1908. We required a total installed capacity of 4,900 K.W. in April 1909 against 4,300 K.W.

in October 1907. This increase of 600 K.W. was required by about October 1908. How to meet this increase was the question. As the machine foundations in the Engine Room were in 1907 all filled up, it was necessary, if an additional small set was put down, to extend the buildings. At this time, we had practically passed through the pioneering stage when small sets were desirable so that extensions would always require large sets which would at the time much exceed the actual requirements.

The cost of carrying out this proposal and providing the necessary boiler and cooling tower capacity to meet the requirements at April 1909 was estimated at about £28,000. Of this, about £20,000 were required by about October 1908 and the balance between then and the middle of 1909.

To meet the estimated load at January 1910, a further increase in Boiler and Cooling Tower plant was required amounting to about £5,000 to £6,000.

To avoid all these expenses, it was decided to remove the Generating Station to Kussara Basin at Mazagon. The view of the Board was that from every point of view the removal was desirable.

By the beginning of 1910, it was thought, the existing Wari Bunder Generating Station would have reached the limit of its capacity both as regards plants and buildings, so that a further extension would have meant new buildings, foundations, chimney stack and plant. The extension therefore would have derived but little benefit as regards cost from being attached to the existing Generating Station at Wari Bunder. It could, it was suggested, be carried out equally well on the new site at Kussara. The extra cost therefore of a transfer to Kussara would consist mainly of the following items :—

Removal of Plant	£ 6,000
Loss on existing buildings and foundations	£ 5,000
Extension of Feeder Cables to Kussara ..	£ 12,000
	£ 23,000

In addition to this there was the difference between the rental we would have obtained by renting the Wari Bunder site and the rental we would have to pay for the Kussara site.

This was estimated at approximately £140 which capitalised at 5 per cent. came to £2,800. Thus the total cost of removal to Kussara was calculated to be £25,800. By remaining at Wari Bunder, the cost of the pipe lines and the capitalised cost of extra pumping, both of which could be saved by removal to Kussara, was estimated at £43,000. There was, therefore, a saving in favour of removal of £17,200, and in addition thereto the advantages enumerated above were considered in the end to turn out to be of much greater importance.

Negotiations were, therefore, opened with the Bombay Port Trust in 1909 for the lease of an area of about 14,000 square yards of land which was being reclaimed at the west end of Kussara Basin, for the purpose of erecting an Electrical Power Station. Eventually, the following terms were agreed upon between the parties :

Plot admeasuring 18,344 square yards to be leased at the following rates :—

Re. 1 per square yard per annum for 1st 10 years.

Re. 1½ per square yard per annum for next 10 years.

Rs. 2 per square yard per annum for remaining 30 years.

Lease to be for a term of 50 years from 1st June 1911, renewable for a further term of 50 years. Assignment to be allowed subject to the consent of the Port Trustees. On the termination of the lease the buildings erected on the land (excluding plant and machinery) to become the property of the Trustees. Notice of the Lessees' desire to renew the lease on the expiration of the term of 50 years to be given twelve months prior to the expiration of the term. 18 months were allowed us free of rent as the period for erecting the buildings.

A supplemental lease for an additional plot of 482 square yards was obtained from the Bombay Port Trust from 15th March 1917 up to 31st May 1961 at the same rate per square yard as is applicable to the principal lease.

The Company used the Kussara Power House for about fifteen years, and when under arrangement with the Hydro Group we commenced to take the whole of our requirements, both for traction and other purposes, from them, we shut down our steam generating plant at Kussara on 11th January 1925. The Power Station had been depreciated from year to year, but there was necessarily a considerable difference

between the value of plant in operation and the sale price of that plant in a limited market when it was taken out of service. The Kussara Power Station assets were therefore shown separately in the Block Account, and a Special Depreciation fund opened to which appropriations amounting to Rs. 2,44,242 are made every year to extinguish all debit balances under this head by 1947, when the first options of purchasing the Company's undertaking under the Deed of Concession and Licenses could be exercised. The Kussara Power Station Assets, including land and buildings, plant and machinery, tools and equipment, were valued at Rs. 85,17,940. Out of these, an aggregate sum of Rs. 5,06,246 was realized on electrical plant, etc., sold and/or transferred to new Receiving Station.

Position of Old Kussara Power House Assets —

Year.	Original cost of assets	Cost Building: Plant, Machinery, etc., transferred and/or sold and written off	Costs to date	Depreciation provided to date.
	Rs	Rs	Rs	Rs
1924	85,17,940		85,17,940	26,30,436
1925		3,48,900	81,69,040	28,81,147
1926		1,35,156	80,33,884	31,26,517
1927		16,237	80,17,647	33,71,077
1928		5,565	80,12,082	36,15,340
1929		388	80,11,694	38,59,582
1930			80,11,694	41,03,824
1931			80,11,694	43,48,066
1932			80,11,694	45,92,308
1933			80,11,694	48,36,550
	85,17,940	5,06,246	80,11,694	48,36,550
1934	Written down to present value by deduction of accumulated Depreciation Rs 48,36,550 and an annual provision of Rs 2,44,242			50,80,792
1934		Less : Depreciation	29,30,902	
1935	29,30,902	2,44,242	26,86,660	

CHAPTER 18.

Generation and Distribution.

It is not possible now to state quite definitely what plant was originally installed in the new Station, but records show that in 1917 the following plant was in commission : —

- (a) Three Brush Vertical Reciprocating Engines each of 1,000 K.W. capacity.
- (b) Two Brush Parsons Steam Turbines each of 1,000 K.W. capacity. (Note The above two Turbines were later removed and a B.T.H. Impulse Type Turbine of 6,000 K.W. capacity was installed.)
- (c) Two Brush Parsons Steam Turbines each of 2,000 K.W. capacity. (Note. In 1922 one of the Brush Turbines was removed, and a Belliss Turbine of 3,000 K.W. capacity was fitted to the existing generator.)
- (d) Eight Babcock & Wilcox Water Tube Boilers with Cham Grate Stokers, each boiler being capable of generating 13,000 pounds of steam per hour.
- (e) Six Babcock & Wilcox Water Tube Boilers with Cham Grate Stokers, each boiler capable of generating 19,000 pounds of Steam per hour.

During the war this Company assisted the Hydro Companies by supplying them with energy, but about 1920 the various Companies comprising the Tata Hydro Group were in a position to generate sufficient energy for this Company to take supply from them. It was decided that it would be a sound policy to purchase such supply in bulk rather than to increase the capacity of the Kussara Steam Generating Station. Two B.T.H. Turbo Generating Sets, each of 6,000 K.W. capacity, which had been previously ordered, but of which the delivery was delayed by conditions arising from the Great War, were not installed and were sold respectively to the Calcutta and Madras Companies. The latter Company also purchased the 6,000 K.W. Set of similar design, which had actually been in service at Kussara for some years. From time to time arrangements were made at Kussara to receive more and more energy in bulk from the Hydro Group, and it was finally decided to shut down the Steam Power Station entirely from 11th January 1925, since which date the whole of the energy required by the Company has been purchased in bulk from the Hydro Group.

As the original Steam Power Station was not convenient for such a purpose, a new Receiving Station was built in the same compound and put into commission in 1927.

The whole of the plant in the Steam Power Station was disposed of in various ways, and since the Receiving Station was put into commission the Steam Power Station buildings have been used as a Transformer Hospital, Distribution Stores, and as Headquarters of the Company's Mains Department.

DISTRIBUTION.

Apollo Sub-Station—Apollo Sub-station in Bakehouse Lane was the original transforming sub-station ; it was put into commission when supply originally commenced in September 1905. Various motor generator units were first installed, but later Rotary Converters were added. This sub-station was equipped for lighting and general purposes supply only. It was not suitable for traction, though it was used for a short time for that purpose in 1907 ; consequently a further sub-station proved essential.

Esplanade Sub-Station.—This sub-station, situated in Patakwadi Road off Carnac Road, originally supplied energy to the Tramway System only, though it was designed (and equipped later) to supply Direct Current to the North Fort and Southern Bazaar Area. Originally this sub-station also was equipped with motor generators, rotary converters being added later.

Kingsway Sub-Station.—With the extension of the Tramway System a further Traction Sub-Station proved necessary ; this was built at the Kingsway Depot, Dadar, about the year 1917, with a small plant capacity suitable only for feeding the section of the Tramways north of Lalbag.

Static Sub-Stations.—From 1905 when supply commenced, the growth of the load necessitated the addition of many Static Transforming Stations in different localities in the City and Island of Bombay. At the present time (1935) there are in all about 118 sub-stations.

Automatic Sub-Station.—From 1920 onwards the growth of the load in the Fort Area caused some uneasiness. That area, originally fed from Apollo Sub-Station only, was laid out for Direct Current Supply. The reason for this was that

in 1905 no satisfactory Alternating Current fan had been designed, and consequently the supply had to be suited to drive Direct Current fans, which alone gave satisfactory service. The problem of extending the Direct Current supply was serious, owing to the congestion underground in the streets and the amount of copper that would have been necessary to maintain the conditions laid down by the Indian Electricity Act. Ultimately it was decided, about 1928, to instal three new Automatic Sub-Stations equipped for supervisory control from Esplanade. These Sub-Stations were located in : —

- (a) Sir Pheroza Shah Mehta Avenue ;
- (b) Palton Road adjacent to the Crawford Market ;
- (c) Telwadi North of Moolji Jetha Market.

They are equipped with Rotary Converters and are run as the load demands under supervisory control from the Esplanade Sub-Station. These three sub-stations having given satisfactory performance, it was decided to convert Apollo Sub-Station on similar lines, the work of which was completed in 1931.

Rectifier Sub-Station.—A small Mercury Arc Rectifier Sub-Station was installed in Colaba Depot in 1930, and a similar plant, to handle Traction Load, in Kingsway Sub Station in 1931.

Street Lighting.—The first experimental Street Lighting was erected for the Bombay Municipality in 1914.

Hire Purchase.—A system of hiring motors to power users was in force from 1910-1916, but was abandoned owing to special circumstances arising largely as a result of War conditions.

Changed conditions later necessitated changed methods, and the inauguration of a vigorous Sales-Service policy. As a part of this rationalization, schemes for Hire Purchase and Hire of Domestic Electrical Appliances were re-initiated in 1927, when the B. E. S. T. Showrooms at Head Office were opened.

CHAPTER 19.

Electric Supply Tariffs.

SUMMARY.

1904-1905.

The Municipality on 6th April 1905 approved the following rates, based on the Maximum Demand System, applied for by the Brush Electrical Engineering Co., Ltd., in December 1904 :—

For Lighting : 8 annas and 3 annas per unit

For Lighting and Fans : 8 annas and 3 annas per unit

For Fans and Power : 8 annas and 1½ annas per unit

June 1905.

(a) Under the Bombay Electric License of 7th June 1905 :—

For any amount up to 40 units for all purposes, Rs. 20 per quarter and for each unit over 40 units, 8 annas per unit.

August 1905.

(b) Under Article 15(b) of the Deed of Concession dated 7th August 1905 :—

- (i) maximum rate of 8 annas per unit for all purposes with a minimum charge of Rs. 20 per quarter
- (ii) for private lighting purposes : 6 annas per unit
- (iii) for public lighting purposes : 3 annas per unit.
- (iv) for power purposes : 3 annas per unit.

September 1905.

For lighting : 8 annas and 3 annas per unit.

For fans : 8 annas and 1½ annas per unit.

Rates charged when the Company began to supply electricity.

June 1906.

1. For combined installations of lighting, fans and motive power : 8 annas and 2 annas per unit.

2. For electric lifts : A flat rate of 5 annas per unit.

August 1907.

1. For combined installations of lights and fans : 8 annas and 2 annas per unit.

2. For electric lifts : 5 annas per unit flat rate.

3. For Motive Power Installations of 5 B.H.P. and upwards : 2 annas per unit flat rate.

April 1908.

For electric lifts : 4 annas per unit flat rate.

(No change in other rates).

December 1910 and January 1911.

For General Purposes.—(Lighting, Punkahs, etc., and Motive Power Installations under 5 B.H.P. capacity) :—

- (a) Commercial and business premises, Clubs, Restaurants, Hotels, Theatres, etc. : $4\frac{1}{2}$ annas per unit, subject to a monthly discount of 1 per cent. for every completed 250 units consumed with a maximum discount of 35 per cent.
- (b) Residential premises and Religious and Educational Institutions : Same as (a) but in no case shall the rate charged exceed 4 annas per unit.
- (c) Hospitals : Same as (a) but in no case shall the rate charged exceed 3.15 annas per unit.

For Motive Power Purposes.—(Installations of 5 B.H.P. and upwards)—

- (d) Lifts : 4 annas per unit. No discounts.
- (e) Industrial Motive Power Installations of from 5 to 10 B.H.P. capacity : 2 annas per unit. No discounts.
- (f) Industrial Motive Power Installations of 10 B.H.P. capacity and upwards : A Standing Charge of Rs. 8 per Kilowatt of Maximum Demand per month, and in addition a Running Charge of two-thirds of an anna per unit consumed.

January 1913.

Special Heating Rates : (No change in other rates).

From 1st October to 31st March for both A.C. & D.C. Supply : 1.5 annas per unit.

From 1st April to 30th September for D.C. Supply : 1.25 annas per unit.

From 1st April to 30th September for A.C. Supply : 1.00 anna per unit.

March 1913.

Cinematographs and Theatres: (No change in other rates).

3 annas per unit with a discount of 1 per cent. for every completed 250 units per month with a maximum discount of 35 per cent.

May 1913.

Illuminated and Sky Signs: 3 annas per unit.

1915.

(a) Introduction of sliding scale for Bulk Supply under Agreements.

(b) Cinematographs and Theatre charges reduced to 2 annas per unit.

January 1916.

Reduction of Connection Charges: Company to bear the cost of 5 yards of service line on private property.

1919.

Heating Rate reduced to one anna per unit.

July 1920.

Meter rent reduced from Re. 1 to 8 annas per month.

1932.

For Motive Power Purposes.—

Industrial Motive Power Installations consuming over 2 lakhs of units per annum: Rates reduced. (See page 330)

March 1934.

Discount of $1\frac{1}{2}$ annas per rupee in case of lights, fans and Motive Power installations under 5 B.H.P. and a discount of 2% on Lifts, Pumps, Industrial Motive Power Installations of 5 B.H.P. and upwards, street lighting installations and special agreements.

January 1935.

Power Rates reduced. (See page 341 *seq.*)

September 1935.

Reductions in rates of lights and fans.

Discounts withdrawn. (See page 344 *seq.*)

Minimum Charge. (See page 345)

Electric Supply Tariffs.

1903-1905.

Although the Bombay Electric Supply & Tramways Company, Limited, was incorporated in England and registered on the 27th June 1905, it was but an evolution of other undertakings. There was the British Electric Traction Company—the organiser of many electric concerns—attempting since 1903 to electrify this city of Bombay. The Brush Electrical Engineering Co., Ltd., as their agents applied to the Bombay Municipality in December 1904 for a license to supply electricity in Bombay on the Maximum Demand System at the following rates :—

For Lighting - 8 annas per unit for the 1st hour's use per day of the maximum supply demanded and 3 annas per unit for all consumption in excess of this quantity.

For Lighting and Fans - 8 annas per unit for the 1st hour's use per day of the maximum supply demanded and 3 annas per unit for all consumption in excess of this quantity

For Fans and Power -- 8 annas per unit for the 1st hour's use per day of the maximum supply demanded and 1½ annas per unit for all consumption in excess of this quantity.

As this schedule of rates and basis of charges was approved by the Municipality on the 6th April 1905, the Brush Co. were granted by the Bombay Government a license under the Indian Electricity Act, 1903, on the 7th June 1905, under the title of "The Bombay Electric License, 1905."

Under Clause 10 of this License, it is stipulated as follows :-

"10 **Maximum Charges** The prices charged by the licensees for energy supplied by them to any consumer shall not exceed those stated in that behalf in the Fourth Annexure, or in the case of a method of charge approved by the Local Government such maximum as the Local Government shall fix on approving the method ; but subject to such maximum and to the provisions of the Act the prices to be charged will be regulated by agreement between the Corporation and the licensees "

The Fourth Annexure of the License runs as follows :—

"Maximum Prices. SECTION 1.

When the licensees charge any consumer by the actual amount of energy supplied to him, they shall be entitled to charge him at the following rates per quarter :—

For any amount up to 40 units for all purposes, rupees twenty, and for each unit over 40 units, eight annas per unit.

SECTION 2.

When the licensees charge any consumer by the electrical quantity contained in the supply given to him they shall be entitled to charge him according to the rates set forth in Section 1 of this Annexure—the amount of energy supplied to him being taken to be the product of that electrical quantity and declared pressure at the consumer's terminals—that is to say, such a constant pressure at these terminals as may be declared by the licensees under the regulations of the Local Government or of the Governor-General in Council.

In this annexure the expression “unit” means the energy contained in a current of 1,000 amperes flowing under an electromotive force of one volt during one hour.

Under Clause 15(b) of the Deed of Concession dated the 7th August 1905 granted by the Corporation to the Company, the Company is authorised—

“To charge (subject to the provisions of the License under the Indian Electricity Act 1903) for supplying electric current for lighting and power purposes at the following rates—namely

- (i) maximum rate of eight annas per Board of Trade Unit for electricity for all purposes with a minimum charge of Rs. 20 per quarter,
- (ii) for private lighting purposes six annas per Board of Trade Unit,
- (iii) for public lighting purposes three annas per Board of Trade Unit, and
- (iv) for power purposes three annas per Board of Trade Unit.”

The Company commenced supply of electrical energy from the 11th September, 1905, and charged the consumers on the Maximum Demand System at the following rates—

For lighting 8 annas and 3 annas per unit

For fans 8 annas and 1½ annas per unit

1906.

In order to push forward the business of the Company, the services of Mr A. I. Cooper, as Chief Engineer, were specially requisitioned. On his arrival in December 1905, he was informed of certain complaints received from consumers about the rates charged by the Company on the Maximum Demand System which, they said, was unintelligible and complicated. With a view to introduce a simple system, viz., the flat rate, he addressed a letter to the Managing Director on the 24th January 1906, saying that the chief

cause of our very slow progress in consumers' connection seemed to be the Maximum Demand System of charging and that if some simpler tariff was adopted we could go ahead more rapidly. He, therefore, recommended the following rates :—

Rates for Private Lighting Purposes.—A flat rate of 6 annas per unit, with sliding scale discounts for quantity (say 5 per cent. for every completed 100 units per month with a minimum of 3 annas per unit).

Rates for Motive Power Purposes.—A flat rate of 3 annas per unit for supply to electric fans and motive power installations of moderate dimensions, with sliding scale discounts for quantity (say 5 per cent. for every completed 500 units per month with a minimum of 2 annas per unit). For large Motive Power Installations special arrangements could be made from time to time.

Rates for Public Lighting Purposes.—(There is apparently no definition in the Indian Electricity Act or in the Deed of Concession of what constitutes Public Lighting. It was, therefore, decided by the Company to attribute it to Street Lighting.) Mr. Cooper made no recommendation for these.

The suggestion made by Mr. Cooper and strongly recommended by Mr. Rimington to the London Board met with opposition from a Committee appointed by the B.E.T. and the Directors.

However, following the suggestion of the Committee to obviate double wiring and double metering, the following tariff was introduced from June 1906 after due notice to the Municipality :—

1. *For Combined Installations of lighting, fans and motive power.*—8 annas per B.O.T. Unit for the first hour's use per day of the maximum supply demanded and 2 annas per B.O.T. Unit for all consumption in excess of this quantity.
2. *For Electric Lifts.*—A flat rate of 5 annas per B.O.T. Unit.

1907.

On the 22nd April 1907, the Managing Director wrote to the Chief Engineer asking him for his views as to what revision of our rates was desirable, so that he (Mr. Rimington) might take up the matter with the Board. Mr. Cooper in reply attributed the slow progress in power supply to small industrial consumers to the existing tariff. As no consumers were then applying for supply under 8 and 3 annas and 8 and 1½ annas rates, he suggested that they should be abolished after

the 30th June, 1907, and in addition to the 8 and 2 annas rate for "a general supply for all purposes except lifts" and the 5 annas flat rate for lifts, a special flat rate for "Bona-fide Industrial Motive Power Installations of 5 B.H.P. and upwards" be introduced. If the Board agreed to create a flat rate for the small Industrial establishments, he recommended the adoption of a rate of 2 annas per unit, and if this was agreed to, he suggested that the connection fee of Rs. 30 be dispensed with in the case of consumers qualifying for this rate (30th May 1907).

On the recommendation of Mr. C. W. G. Little, the Board's Technical Adviser in London, the Directors accepted the proposals of Mr. Cooper and the following rates were put in force from the 1st August, 1907, after giving notice to all consumers including the Local Government and the Bombay Municipality on 1st July 1907 :—

For Combined Installations of lights and fans.-- 8 annas per unit for the 1st hour's use per day of the maximum supply demanded as recorded by the maximum Demand Indicator and 2 annas per unit for all consumption in excess of this quantity.

For Electric Lifts.-- 5 annas flat rate per unit.

For Motive Power Installations of 5 B. H. P. and upwards. -- 2 annas flat rate per unit.

Service cable for Motive Power Installations was to be given free and the connection fee of Rs. 30 was not to be charged.

During the ensuing months, viz., October to December, 1907, Mr. Cooper and Mr. Chanter made a recommendation to increase by 10 per cent. the consumers' bills as a surcharge in consequence of the substantial advance in the price of coal. The Board at first recommended that instead of increasing the consumers' bills by 10 per cent., the following rate be increased from 8 annas and 2 annas to 8 annas and 2½ annas. The Board, however, after further consideration decided not to take any action in the matter on the ground that they did not wish to upset the "very general feeling in Bombay" that the price of our electricity was low.

1908.

On the 19th March 1908, Mr. Rimington was summoned by the Tramway Committee of the Corporation to discuss "proposed alterations in our tariff." He was informed by

Sir Pherozechah Mehta at this meeting that the Committee desired the Commissioner to "negotiate" with him in favour of the substitution of a flat rate tariff for the existing Maximum Demand System. Mr. Rimington objected and said that the proposal could not be given effect to without causing much unsettlement and discontent amongst many of the existing customers. Sir Pherozechah maintained that the feeling against the Maximum Demand System was very strong, that no one understood that method of charging, and that customers who did not use their installations up to late hours were unduly penalised. He instanced the case of the Ripon Club, where he said, because the Club was little used after 8 P.M., the cost of electric lighting exceeded the cost of gas lighting by 50 per cent. Sir Pherozechah was supported by several other Members of the Committee on account of the vexatious and unintelligible character of the Maximum Demand System, and it was resolved that the Commissioner should proceed with the matter.

The matter was discussed for several years and the following revised tariff came into force from the 1st December 1910 :—

" THE BOMBAY ELECTRIC SUPPLY & TRAMWAYS CO., LTD.

NOTICE OF CHANGE OF RATES.

" The Bombay Electric Supply and Tramways Company Limited, beg to give notice under Clause X of the Schedule to Act IX of 1910, and in accordance with the sanction of the Municipality given under Resolution No 4512 of October 20th, 1910, that as from December 1st, 1910, they will discontinue charging for the supply of electrical energy upon the Maximum Demand System and will substitute therefor a system of Flat Rates.

" From December 1st, 1910, the charges will be as follows :—

- (a) *For General Purposes*—(Lighting, Punkahs, Small Motors, etc.)— $4\frac{1}{2}$ annas per unit, subject to a monthly discount of 1 per cent. for every completed 250 units consumed with a maximum discount of 35 per cent. Private houses, hospitals, churches, temples, mosques and schools are however guaranteed that their rate shall never exceed 4 annas per unit.
- (b) *For Lifts*.—4 annas per unit. No discount.
- (c) *For Industrial Motive Power*—Installations of 5 brake horse power and upwards, 2 annas per unit. No discount. Special terms will, however, be quoted to large consumers.

“ The attention of consumers is especially drawn to the following points in connection with the Company's business :—

1. That all accounts must be paid at the Head Office of the Company, Colaba Causeway
2. That the abolition of the use of maximum demand indicators renders unnecessary the practice of reading meters in the presence of consumers
3. That the Company's rates for supply are based upon a prompt settlement of their monthly accounts. Deposits will therefore be called for in all cases in which any delay in payment takes place

A. T. COOPER,

October 24th, 1910

Managing Engineer.

As the Chiefs of the B.E.S.&T. Co., found that the hospitals would be penalised under the new tariffs, they moved the Board of Directors to lower the charge from 4 annas to 3.15 annas per unit. This was accepted and from the 10th December 1910, hospitals were charged by this lower rate.

1911.

In order to equalise the load on our system during the night with that of the day, the Company introduced a special Power Rate for motors of 10 B H P. and upwards. To give effect to this as also to revise the old scale the following circular was issued on the 1st January 1911 :—

THE BOMBAY ELECTRIC SUPPLY & TRAMWAYS CO., LTD.

RATES FOR ELECTRIC SUPPLY.

For General Purposes (Lighting, Punks, etc., and Motive Power Installations under 5 Brake Horse Power capacity)

- (a) Commercial and business premises, Clubs, Restaurants, Hotels, Theatres, etc.

4½ annas per unit, subject to a monthly discount of 1 per cent. for every completed 250 units consumed with a maximum discount of 35 per cent

- (b) Residential premises and Religious and Educational Institutions—

Same as (a) but in no case shall the rate charged exceed 4 annas per unit

(c) *Hospitals.*—

Same as (a) but in no case shall the rate charged exceed 3.15 annas per unit.

For Motive Power Purposes.—(Installations of 5 Brake Horse Power and upwards.)

(d) *Lifts.*—

4 annas per unit. No discounts.

(e) *Industrial Motive Power Installations of from 5 to 10 Brake Horse Power capacity*—

2 annas per unit. No discounts.

(f) *Industrial Motive Power Installations of 10 Brake Horse Power capacity and upwards.*—

A Standing Charge of Rs. 8 per Kilowatt of Maximum Demand per month, and in addition a Running Charge of two-thirds of an anna per unit consumed.

The application of this rate will, however, be subject to the following conditions :—

- (1) In no case will an average rate higher than 2 annas per unit be charged.
- (2) In no case will average rates be allowed lower than those given in the following table.

ALTERNATING CURRENT INSTALLATIONS.

Size of Installation aggregate Brake Horse Power		Minimum Average rate per unit allowed.	
			Ans.
10 B. H. P. & upwards to	50 B. H. P.	..	1.4
50 " "	75 "	..	1.35
75 " "	100 "	..	1.30
100 " "	125 "	..	1.25
125 " "	150 "	..	1.20
150 B. H. P. and upwards	.. "	..	No limit.

Direct Current Installations.

10 B. H. P. and upwards	.. "	..	1.6
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NOTE.—The above rates for Industrial Motive Power only apply to Installations situated on the routes of the Company's Distributing Mains. Should any extension of Mains be necessary, special terms must be arranged in each case.

A. T. COOPER,
Managing Engineer.

January 1st, 1911.

1912.

On the 28th November 1912, Messrs. Greaves Cotton & Co., a firm of Wiring Contractors in Bombay, raised the question of special rates for Electric Heating. As so far the Company had done nothing in this direction, it was thought that it would be quite possible that in the future Electric Heating might be used to a fairly large extent, especially for laundries and manufacturing purposes. The matter was referred to the London Board. Mr. Cooper suggested that a rate be decided upon which would be made applicable on the condition that the *whole* cost of service connection would be payable by the consumer unless supply were taken for other purposes as well, and that rentals for the Heating Circuit Meters be paid in any case.

1913.

Mr. Little, the Consulting Engineer to the London Board, advised the Directors readily to accept Mr. Cooper's proposal and with their sanction the following special Heating Rate was introduced in January 1913 :—

From 1st October to 31st March for both					
A.C. & D.C. Supply	..	..	..	1.5	annas per unit
From 1st April to 30th September for					
D.C. Supply	..	..	..	1.25	.. .. .
From 1st April to 30th September for					
A.C. Supply	..	..	..	1.00	.. .. .

As the revised system of charging sanctioned by the Corporation in October 1910 was only temporary for a period of two years and was subject to equitable re-adjustment after that period, the matter was referred to the Corporation by the Commissioner on the 24th October 1912. The Commissioner pointed out that the system was in force for two years and that the only complaint received was one from the Bombay Presidency Trades Association who, while complaining that the trading community was penalised, only gave figures for nine firms with eleven places of business. On the other hand the Managing Director of the Company gave a much more complete list comprising 111 firms coming under the shop and showroom class from which it appeared that the new system entailed a charge of 4.47 annas per unit against 4.72 under the old system. In view of this statement, the Commissioner observed that it was impossible to say that

the new system was more costly than the old to the above class of consumers and he pointed out that no complaint has been received from any other class. The question was forwarded to the Tramways Committee on the 18th November 1912 who under the leadership of Sir Pherozechah M. Mehta, saw no reason to disturb the existing arrangement in regard to the tariff rate for supply of electrical energy (11th February 1913). On the proposal of Mr. Phiroze C. Sethna, seconded by Mr. R. T. Nariman, the Corporation on the 17th March 1913 adopted the Committee's report.

About this time, the Cinema industry was gaining popularity and Cinema houses began to grow in number. Our Company was interested in this development. The question of applying special rate to Cinematograph Theatres was discussed as it was found difficult at our ordinary rates to compete successfully with private generating plants. Up to this time (March 1913) we used to charge Cinematograph Theatres our ordinary the then (a) rates for all consumption except that of the Cinematograph Arc Lamps and these we supplied at a flat rate of 2 annas per unit coupled with the condition that they must be fed through a Motor Generator at 460 volts D.C. or 3 phase A.C. so as to avoid pressure fluctuations on our distributing mains. The effect of this double rate was to give the following approximate averages :—

Gaiety Theatre	..	..	..	..	3.3 annas per unit.
Alexandra Theatre	..	..	..	..	4.3 " " "
Coronation Theatre	..	..	..	..	3.3 " " "

The 'Edward' Theatre, which had previously obtained an average rate of 3.3 annas, changed hands about this time and the new owners proposed to put in a private plant unless we agreed to give them a more favourable rate. The following rate was therefore agreed upon by the Company with the owners of the 'Edward' Theatre and this rate was henceforth applied to all bona fide Cinematograph Theatres and to the whole of their consumption, *i.e.* including the Arc Lamp Motor Generators :—

3 annas per unit with a discount of 1 per cent. for every completed 250 units per month with a maximum discount of 35 per cent

As the utility of advertising on a large scale was being fully realised and the importance of illuminated signs and sky signs was discovered, the problem of a tariff for this class of

consumers cropped up and as per London Letter No. 352 of 3rd May 1913, the same charge as to Cinemas, *viz.*, 3 annas per unit less discount was introduced.

Further, the demand for energy on account of illumination during wedding festivals and other functions resulted in drawing out a table of charges, *viz.*, 8, 4½ and 4 annas per unit by special arrangement.

1915.

In this year we introduced a rate on sliding scale for Bulk Supply under agreements.

A further concession to the fast increasing number of Cinemas was given in this year, *viz.*, the rate was reduced from 3 annas to 2 annas per unit but with no discount.

1917.

Owing to great delays and difficulties of getting plant from home the Company ran short of certain types of meters, although fresh stocks had been on order for many months. It was thought that the supply was likely to prove inadequate to the demands of new consumers and might at any time be stopped altogether. Under this circumstances, the Company had two alternatives either to issue notice (as the Calcutta Electric Supply had already done) to decline to connect any new consumers, or to adopt a fixed charge per point per month by agreement with the applicant for supply based on the average return per point already connected calculated from the bills of our existing consumers. (*Note.*—A "Point" is the point of connection with an electric wire from which a lamp or fan is hung, or a plug in a wall from which connection is made to a lamp or other electrical appliance.)

The former alternative would have involved a good deal of public inconvenience, and the latter exposed us to risk of loss in the absence of any means of measuring the actual amount of current consumed. The latter was, however, thought to be the lesser evil. The charge we proposed making to new consumers whom it was impossible to provide with meters was Rupee one per point per month, which on the basis of the average yield per point for the past six months from the different classes of existing consumers (other than Industrial power consumers) worked out as closely as we could calculate to the equivalent of our present authorised tariff charges.

As it would be *ultra vires* for us to vary the tariff rates, approved and sanctioned by the Corporation as they were, even as a temporary measure necessitated by special circumstances beyond our control, without Municipal sanction, a letter dated the 13th March 1917 was addressed by the Managing Director to the Municipal Commissioner for obtaining the sanction of the Corporation to the temporary arrangement with new consumers described above.

The matter was as usual referred to the Tramways Committee and as recommended by it, the Corporation gave its approval on the 12th July 1917 to allow the Company as a temporary measure to charge new applicants for the supply of energy, who could not be supplied with meters, at the rate of Re. 1 per point per month, subject to the undertaking that the meters would be fitted directly they were obtainable and that whatever might be the difficulties the Company should provide meters and place the new consumers on the regular tariff charges within one year after the termination of the war.

1919.

The heating was made a flat rate of one anna per unit all the year round.

1920.

From 1st July 1920, meter rent was reduced from Re. 1 to 8 annas per month.

1922.

On the 20th May 1922, Mr. C. N. Moberly, the Managing Engineer, addressed a letter to the Municipal Commissioner asking him to lay before the Corporation an application for a revision of the existing scale of fares on the Tramways and the charges for the supply of electrical energy. "The general charge," the letter continued, "for electrical energy is 4½ annas per unit less discounts, with special tariffs for power and certain institutions. Having regard to the distance of Bombay from the coal-fields and the consequent high generating charges, we believe that there is no other tariff so low in circumstances which are at all comparable." The Company, therefore, proposed that an authority be given to it to add a surcharge of 15 per cent. to the total of all bills rendered for the supply of electrical energy, except in case of large consumers with whom contracts were current and of Hospitals, to which the existing rate of annas 3.15 would continue to apply. The rates charged under contract were proposed to be raised when the current contracts expired. Various reasons in support

of the application were advanced, including cost of construction, machinery and coal, rise in wages, additional concessions, such as Provident Fund, gratuity on retirement, bonus, etc.

The Tramways Committee reported that the increase in Tramway fares asked for be not sanctioned. It, however, recommended that the Company be allowed to add a surcharge of $12\frac{1}{2}$ per cent. to the total of all bills rendered for the supply of energy. The Corporation approved the first recommendation of the Tramways Committee regarding the Tramway fare, but sent the second recommendation again to the Committee for reconsideration.

The Committee very carefully considered the question once again from all its aspects and came to the conclusion that no immediate increase in the charges was called for as the expenses must necessarily go down with the existing decline in prices, and as the Company's income from all sources was likely to increase owing to the increased demand on the electrical energy and the uniformly growing tramway traffic. The Committee, therefore, recommended that so long as the Tramway Company was able to give a dividend of 8 per cent. on their Ordinary Shares after allowing for depreciation and other charges permitted under the Income Tax Act, the increase asked for in the rates for electrical charges should not be granted and that the Tramway Company be called upon to undertake extensions to their existing lines and be informed that should they by carrying out the extensions be at any time compelled to pay a dividend below 8 per cent. the Corporation will favourably consider the question of supplementing their income.

By their Resolution No. 11057, dated the 25th February 1924, the Corporation merely recorded the Tramways Committee's Report regarding the revision of the charges for the supply of electrical energy.

The Commissioner requested the Company to favour him with its views on the following proposition, which had been passed by the Corporation on the 17th March 1930 :

" Resolution No. 11246 — That in view of the great necessity of the cheap supply of electric power in the development of the city and its amenities and following the example of Calcutta, this Corporation authorises the Commissioner to address The B. E. S. & L. Company, Ltd., urging upon it to lower the rates of supply with particular reference to business premises and private residences by at least 25 per cent. of the present rates."

The reply of our General Manager, dated the 30th April 1930, was:—

“ The present rates were fixed in October 1910, when most operating charges were far lower than at the present day. I believe it is correct to say that Electrical Energy is the only commodity in Bombay, the price of which was not raised during the period of very high prices obtaining towards the close of the war and after the Armistice.

“ As certain misconceptions seem to exist regarding the conditions in which an Electric Supply Company operates, the following points are placed before the Corporation for their information.

“ It has been assumed in this discussion that, because this Company purchases electrical energy from the Hydro Companies in bulk at a certain rate, the difference between that and the selling rate is largely profit. That is by no means the case. The Company has to bear the very considerable losses in transformation and distribution. It has to meet interest, depreciation and other charges on a net-work of mains and other works, which have cost approximately three crores of rupees. It has to maintain a Staff of approximately a thousand employees engaged in running our plant, repairs and maintenance, meter reading, inspection and supervision, accounting, and ancillary services. It has also constantly to incur heavy capital expenditure in extending and improving the distribution system; in recent years a sum of sixty-eight lakhs of rupees has been spent in these directions, and further works are in progress to improve and safeguard the supply. Much of the electrical energy is sold at the low rate of one anna per unit. When all these items are taken into account the margin of profit is moderate.

“ Nor can we admit that the Bombay rates compare unfavourably with those charged in Calcutta. A determining factor in the cost of a electrical energy is the price of coal. That governed the rate agreed upon with the Hydro Companies for the purchase of electrical energy in bulk. Coal in Bombay is approximately three times the price of coal in Calcutta, and the Calcutta Electric Supply Corporation has the advantages of the industrial load, which materially reduces costs ; this in Bombay is taken by the Hydro Companies. When allowance is made for these conditions, the comparison with Calcutta is entirely in favour of Bombay.

“ There is the further consideration that the Deed of Concession was not an unilateral, but a bi-lateral agreement. In return for the advantages accruing from the Supply Branch, the BEST undertook to carry tramway passengers between any two points of the system as it then existed at the uniform charge of one anna. Mr. Dalrymple, the distinguished Tramway Expert engaged by the Company in 1924, reported : ‘ I do not know of any other Tramway Company that has come under such an onerous obligation as is contained in your Deed of Concession.’ That condition obtains still, despite the rise in all equipment and operating costs. Moreover, in the public interest, the Company has refrained from charging the higher fares on extensions sanctioned by the Municipal

Corporation in Resolution No 8830, dated 20th December 1928. It also maintains as a public facility a first-class omnibus service at a substantial annual loss. The effect of these responsibilities is that the Traction Branch is operated at an annual loss to the Company, notwithstanding which the Tramway Service has been, and is being, steadily improved.

"In these circumstances, the Company is unable to accept the proposal in the Resolution of the Municipal Corporation under reply. But it is fully alive to its responsibilities as a public utility Corporation. Recently experts in electrical tariffs from England and America have closely examined the system of charges in force. Their reports, when received, will be most carefully considered by the Board of Directors, but their conclusion is that in comparison with other electrical undertakings, our present charges for lights, fans and power are moderate."

The question of rates was exhaustively studied by Mr. J. T. H. Legge, Chief Engineer and Manager of the Shropshire, Worcestershire and Staffordshire Electric Power Co., who deputed his Company's rate expert, Mr. P. B. Mair, to Bombay (arrived on 27th December 1929 and departed on 15th February 1930) to make inquiries *in situ*. The Company was advised that its general rates were fair and equitable, and should be maintained; also that the fairest means of charging for electric supply was through the medium of a two part tariff, which was in general adoption in all progressive countries. A two part tariff was, however, impracticable after Government introduced the surcharge on electricity consumed for lights and fans in 1932. The Company, therefore, inaugurated a progressive reduction in all its charges. As a first step in relieving the industrial depression, on 8th February 1932, it reduced its charges for power.

These were as follows :—

- I. Industrial Motive Power Installations consuming over 5 lakhs of units per annum—General Power Rates—G.P. 1 :

Maximum Demand Charge :—

Rs. 4 per month per kilowatt of maximum demand which payment entitles the Consumer to use 15 units for each kilowatt, upto 100 kilowatts, and 45 units for each kilowatt in excess of 100 kilowatts

plus

Energy Charge :—

.60 anna per unit for the next 65,000 units used per month and .45 anna per unit for all additional units used per month.

Lighting Charge :—

1.25 annas per unit.

Maximum Demand :—The maximum demand for billing purposes during any month shall be the maximum demand registered as occurring during such month provided however that such maximum demand shall not in any case be less than eighty-five (85) per cent. of the maximum demand occurring during the twelve months ending with the billing month whether or not the Consumer takes supply to that extent.

Lighting :—The Consumer may at his option use up to 20 per cent. of the total energy supplied under this Agreement for lighting his premises.

II. G. P. 2 Rate :

(Suitable for consumers who are prepared to enter into a two years' agreement, and provide sub-station accommodation if required by the Company).

(a) *Maximum Demand Charge* :—

Rs. 7 per Kilowatt per month for the first 50 Kilowatts of Maximum Demand.

Plus Rs. 5 per Kilowatt per month for the next 100 Kilowatts of Maximum Demand.

Plus Rs. 4 per Kilowatt per month for all additional Kilowatts of Maximum Demand.

(b) *Energy Charge* :—

0.667 anna per unit for the first 22,500 units per month, and

0.5 anna per unit for all additional units.

Subject to :—

(c) A maximum charge of 1.5 annas per unit, provided that the power consumption is equal to or is in excess of 24 units per Kilowatt of the highest Maximum Demand recorded during the 6 monthly period ending with the billing month.

(d) A minimum monthly charge of Rs. 2-4 per Kilowatt of Maximum Demand as specified under (c).

Lighting Charge :—

All energy consumed for lighting and fans will be charged at the standard tariff, namely :—

4.5 annas per unit, subject to a monthly discount of one per cent. for every completed 250 units consumed with a maximum discount of 35 per cent.

Meter Rental—A charge of eight annas per month per meter will be made.

The turn of the consumers of electricity for lights and fans came next, and on and from 1st March 1934, discounts for prompt payment were allowed on the following scale :—

Business Premises, Clubs, Restaurants, Hotels, etc., Residential Premises, Religious and Educational Institutions, and Hospitals :—

1½ annas (9.3/8 per cent.) in each completed Rupee billed for Electricity consumed by Lighting, Punkhas and Motive installations under 5 B.H.P. capacity. No discount will be allowed on the one anna rate charged for domestic appliances.

Lifts, Pumps (5 B H P and above) industrial motive power (5 B H P and upwards), special agreements —
2 per cent on the bills for electricity consumed

In explaining the general policy pursued, the Chairman Sir Purshotamdas Thakurdas, stated at the 14th Annual General Meeting of the Company held on the 12th April 1934, as follows —

“ I should like briefly to explain the reasons which have induced this policy. We are a commercial Company formed and worked for profit. In that sense the Directors are primarily trustees for the shareholders. But we are not an ordinary commercial company. We are a Public Utility Corporation, operating under licenses for the supply of energy to the public for all purposes and for Electric Traction and under a Concession covering the provision of tramway facilities. The direct responsibility of the Board to the shareholders has therefore in their interest to be related to their responsibility to the Government, the Municipal Corporation and the community as a Public Utility Company. Experience in other countries has shown that the true method of reconciling these dual responsibilities is to divide profits over and above a reasonable dividend to the shareholders with reduced charges to the community.”

In 1934 the rates for power were further reduced and since January 1935 they remained as follows —

FOR MOTIVE POWER PURPOSES — (Installation of 5 Brake Horse Power and upwards)

G. P. 1 }
G. P. 2 } Agreements Rates on application as below —

Rate G. P. 1 35

This rate is applicable to Industrial Motive Power Consumers using 5 lakhs units and upwards per annum under agreement for a period of 5 years

Maximum Demand Charge Rs. 4 per month per kW of Maximum Demand which payment entitles consumer to use without additional charge 25 units for each kW up to 100 kW and 50 units for each kW in excess of 100 kW

/flu

Energy Charge — 0.50 anna per unit for the next 100,000 units used per month and 0.40 anna for all additional units used per month

Power Factor Discount A discount (up to a maximum of 10 per cent) will be allowed on the above tariff at the rate of $\frac{1}{2}$ per cent for each completed 1 per cent by which the average monthly Power Factor of the consumer exceeds 80 per cent

The clause regarding Power Factor Discount was from 1st July 1935 changed to A discount (upto a maximum of 15 per cent) will be allowed on the above tariff at the rate of $\frac{1}{2}$ of one per cent for each completed one per cent, by which the average monthly Power Factor of the consumers exceeds 80 per cent

Prompt Payment Discount :—A cash discount of 2 per cent. will be allowed on bills paid within 10 days from the date of submission.

Minimum Monthly Bill :—The Maximum Demand for billing purposes during any month shall be the Maximum Demand registered as occurring during that month provided however that such Maximum Demand shall not in any case be taken as less than 75 per cent. of the Maximum Demand occurring during the twelve months ending with the billing month, whether or not the consumer takes supply to that extent.

Lighting :—The consumer may at his option use up to 20 per cent. of the energy supplied under this agreement for lighting purposes.

Rate G.P. 2-35 :

Applicable to Industrial Motive Power Consumers under agreement for a minimum period of 2 years.

Maximum Demand Charge :—

Rs. 7 per K.W. per month for the first 25 K.W. of Maximum Demand, *plus*

Rs. 4 per K.W. per month for all additional K.W. of Maximum Demand.

Plus

Energy Charge :—

0.667 anna per unit for the first 2,400 units per month *plus*

0.5 anna per unit for the next 12,000 unit per month *plus*

0.45 anna per unit for all additional units per month.

Subject to the following conditions :—

(a) The average rate per unit consumed in any month shall not exceed 1.5 annas provided the power consumption is not less than 24 units per K.W. of the Maximum Demand recorded during the six months period ending with the billing month.

(b) If, in any month, the consumption falls below the specified minimum, a charge for 24 units per K.W. of the Maximum Demand recorded during the six months' period ending with the billing month will be made for that month at 1.5 annas per unit.

Lighting :—The consumer may at his option use up to 20 per cent. of the above units for lighting his premises.

Meter Rental :—Nil.

G. P. 3.—INDUSTRIAL MOTIVE POWER INSTALLATIONS OF 10 BRAKE HORSE POWER AND UPWARDS SINCE OCTOBER 1934 :—

(a) Applicable to consumers who purchase from the Company the whole of their requirements of energy for motive power and lighting purposes :—

1.5 annas per unit for the first 120 units per month per Brake Horse Power connected and 0.75 anna per unit for all additional units consumed for motive power

purposes, subject to a minimum monthly charge of 12 annas per Brake Horse Power or part of a Brake Horse Power connected for the first 15 Brake Horse Power and 9 annas per Brake Horse Power or part of a Brake Horse Power for all motive power load in excess of 15 Brake Horse Power.

- * (b) Applicable to consumers who *do not* purchase from the Company the whole of their requirements of energy for motive power and lighting purposes :—

1.5 annas per unit for the first 120 units per month per Brake Horse Power connected and 0.75 anna per unit for all additional units consumed for motive power purposes, subject to a monthly minimum charge of Rs. 1-8 per Brake Horse Power or part of a Brake Horse Power connected.

G. P. 4.—INDUSTRIAL MOTIVE POWER INSTALLATIONS OF 5 BRAKE HORSE POWER AND OVER, BUT LESS THAN 10 BRAKE HORSE POWER :—

2 annas per unit for the first 350 units per month and 1.25 annas for each additional unit.

G. P. 5.—INDUSTRIAL MOTIVE POWER INSTALLATIONS OF 5 BRAKE HORSE POWER AND UPWARDS :—

*(At first sanctioned for one year only from 1st January 1935
Confirmed as a Standard Tariff thereafter.)*

Applicable to consumers who purchase from the Company the whole of their requirements of energy for motive power and lighting purposes .—

1.5 annas per unit for the first 360 units consumed per month and 1 anna per unit for all additional units consumed for motive power purposes, subject to a minimum charge of :—

	Brake Horse Power.	
Rs. 3-12 per month for installation of	..	5 upto 10
Rs. 7- 8 „ „ „ „ „ „	..	10 „ 15
Rs. 11- 4 „ „ „ „ „ „	..	15 „ 25
Rs. 16-14 „ „ „ „ „ „	..	25 „ 50
Rs. 30-15 „ „ „ „ „ „	..	50 „ 100
Rs. 50- 0 „ „ „ „ „ „	..	100 or more.

* *Note.*—The minimum monthly charge of Rs. 1-8-0 per B.H.P. was applicable to all consumers under this tariff from July 1934 to September 1934.

As from 1st September 1935, the following reductions in the rates of lighting and fans were published :—

(a) Commercial Premises.

Instead of the present basic rate of $4\frac{1}{2}$ annas per unit, which will remain unaltered, the following revised rates will be billed :—

For the first 500 units consumed in any month, annas 4 per unit.

For the next 2,000 units consumed in any month, annas $3\frac{1}{2}$ per unit.

For the next 2,500 units consumed in any month, annas $2\frac{1}{4}$ per unit.

For all excess units consumed in any month, annas $2\frac{1}{4}$ per unit.

(b) Residences, Schools, Educational Institutions.

Instead of the present basic rate of 4 annas per unit which will remain unaltered, the following revised rates will be billed : -

For the first 50 units consumed in any month, annas $3\frac{1}{2}$ per unit.

For the next 100 units consumed in any month, annas $3\frac{1}{4}$ per unit.

For all excess units consumed in any month, annas 3 per unit.

(c) Hospitals.

Instead of the present maximum rate of 3.15 annas per unit, the revised Commercial rate as scheduled above will be billed subject to a maximum of annas $2\frac{3}{4}$ per unit

(d) Quarterly Minimum Charge Adjustment.

If any consumer uses less than 33 units in any one period of 3 months, all the units consumed by him during such period will be charged at annas $4\frac{1}{2}$ per unit instead of annas 5 per unit the present charge. Consumers using 33 to 40 units in any one period of 3 months will be billed a fixed charge of Rs. 9 instead of the existing charge of Rs. 10

Simultaneously, with the introduction of these rates, all discounts on these rates will be withdrawn.

These revisions will remain in force until further notice.

The combined effect of these revised tariffs was to reduce the charges to consumers by no less a sum than 4.86 lakhs a year.

MINIMUM CHARGE. SUMMARY.

Article 15 (b) (1) of the Deed of Concession provides a maximum rate of eight annas per Board of Trade Unit for all purposes with a minimum charge of Rs. 20 per quarter.

Clause 10 (4th Annexure, Section 1) of the Bombay Electric License, 1905, entitles the Company to levy the same charge per quarter, *viz.*, for any amount up to 40 units for all purposes, rupees twenty, and for each unit over 40 units, eight annas per unit.

1905 —Sanctioned charge of Rs. 9 per quarter even if no energy was consumed

In actual practice Company charged Rs. 3 per month even though no energy was consumed

1916 —Sanctioned charge of 5 annas per unit in case in which the consumption for any quarter fell below 40 units

No charge per quarter where no energy was consumed

Minimum charge to be levied on a quarterly basis of assessment

1925 —Sanctioned charge of not more than Rs. 10 to all consumers who consumed energy between 33 and 39 units in a quarter

1935 —Sanctioned charge of $4\frac{1}{2}$ annas per unit in case in which the consumption for any quarter fell below 33 units. Rs. 9 for consumption for energy between 33 and 40 units in a quarter

MINIMUM CHARGE TO CONSUMERS.

1905.

Under the Bombay Municipal Corporation Resolution No. 107 dated the 6th April 1905, it was provided that the minimum charge to be levied by The B. E. S. & T. Co. Ltd. *even if no energy was consumed* should be Rs. 9 *per quarter*. The resolution thus authorised the Company to levy :—

1. A minimum charge of Rs. 9 per quarter (and not Rs. 3 per month) ;
2. Even though no energy was consumed during that quarter.

The Company, however, sent out bills monthly according to its standard practice and charged the consumers Rs. 3 per month, even though no energy was consumed. This operated very unfairly as will be seen from the following example :—

	Jan.	Feb.	Mar.		
Units consumed ..	0	1	36		
Co.'s charges ..	Rs. 3-0	Rs. 3-0	Rs. 9-0	Total Rs.	15-0
Correct charges ..	„ 0-0	„ 0-4	„ 9-0	„	9-4
Company's gain and Consumer's loss ..				Rs.	5-12

1917.

It was contended by the Electrical Engineer to the Government that :—

- (1) the above method of levying a minimum charge of Rs. 3 per month was legally unauthorised ;
- (2) the resolution of 1905 so far as it authorised the Company to levy a minimum charge *even if no energy was consumed* was *ultra vires* without the sanction of the Local Government ; and that
- (3) the “ quarter ” should be the recognised quarter of the calendar year.

Difference having thus arisen between the Company and the Electrical Engineer, the matter was with concurrence referred by Mr. F. C. Rimington, the then Managing Director of the Company, by his letter No. 5445 dated the 4th September 1916 to the Chief Secretary to Government, Public Works

Department, and the following points were raised for the decision of the Government :—

- (1) Whether this Company is or is not under its legally authorised tariff of rates to charge a consumer, whose aggregate consumption in any one quarter of the year falls below 40 units, a minimum charge of Rs. 9 for that quarter ?
- (2) Whether, in the event of a consumer consuming no electrical energy whatsoever in any one quarter, that charge may still be made ?
- (3) Whether the quarter referred to in our License and in the Proceedings of the Corporation is intended to designate any three months of the year or only what the Electrical Engineer describes as a "calendar year" ?

With regard to (1), Mr. Rimington argued that the Company's Supply License from Government provides that it may charge per quarter "for any amount up to 40 units for all purposes rupees twenty, and for each unit over 40 units, eight annas per unit" (4th Annexure), but Clause 10 of the License provides "that subject to such maximum and the provisions of the Act, the prices to be charged will be regulated by agreement between the Corporation and the Licensee." He thought that the failure to obtain the sanction of the Local Government in connection with the Corporation's Resolution of 1905 empowering the Company to levy a minimum charge even though no energy was consumed, must have been an oversight ; but if the omission was regarded as upsetting the agreement of 1905, then, he submitted that the Company was entitled to fall back upon the terms of the License and to charge Rs. 20 in respect of supply for any quarter of the year falling short of 40 units.

With reference to the 2nd point, he said that "the intention of both the License and of the Indian Electricity Act of 1910 (see Clause VI (1) (a) of the Schedule) appears to me clearly to be that we should be insured a reasonable return for our outlay from consumers whom we connect to our mains. This could hardly be held to be the case if we are to be called upon to maintain free of all charge connections with consumers who for a period of three months or longer consume no energy."

With regard to the third issue, he was advised that the term "calendar quarter" was not known in law, the

“quarter” contemplated by the License being any quarter or three months of any year.

The report submitted by the Electrical Engineer to Government on the three points is summarised below :—

Point (1). The difficulty had arisen solely through the Company having departed from the method of charge provided in their License. The provisions of the License are as follows :—

“When the Licensees charge any consumer by the actual amount of energy supplied to him, they shall be entitled to charge him at the following *rates per quarter* :—

For any amount up to 40 units for all purposes, Rs. 20 and for each unit over 40 units, 8 annas per unit.”

Further, Clause 10 states :—

“The prices charged by the Licensees for energy supplied by them to any consumer shall not exceed those stated in that behalf in the Fourth Annexure (as stated above), or in the case of a method of charge approved by the Local Government such maximum as the Local Government shall fix on approving the method, but subject to such maximum and to the provisions of the Act, the prices to be charged will be regulated by agreement between the Corporation and the Licensees.”

It will be observed that the system sanctioned in the license is based on the accounts being submitted *every quarter*. The Company, however, adopted a monthly system of charging, and this departure from the license should not have been made without the approval of the Government, the reason being that the change was to the advantage of the Company and to the disadvantage of the consumer, as illustrated by the example given in the beginning of this Note.

On the 20th October 1910 certain rates were sanctioned by the Corporation in modification of those sanctioned before. These rates exceeded those originally sanctioned and did not include any minimum rate at all. Whether it was the intention of the Corporation that the minimum rate should remain in force with these enhanced rates must be ascertained. There was nothing in the documents submitted by the Company to show that that was the case. Hence the agreement of 1910 with the Corporation did not allow the Company to charge a minimum rate.

Point (2). The Company could not charge when no energy was used, either under the terms of their License or the Indian

Electricity Act. They were, however, protected by the Electricity Act in that they were not bound to give a supply at all unless the consumer agreed to take sufficient energy to yield a reasonable return on the Company's outlay. In addition to that the Company protected itself by levying a high charge for connecting and installation, *viz.* Rs. 15 and an equally high monthly charge as meter rental, namely, Re. 1. The practice in Europe was no charge for connection and Re. 1 per quarter for meter rental.

Point (3). Quarter should be the recognised quarter of the calendar month.

The whole correspondence was in November 1916 forwarded by Government to the Municipal Commissioner for the Corporation's remarks.

As the opinion of the Municipal Executive Engineer was not explicit and as he wished that legal opinion be obtained, the following two questions were referred by the Commissioner to the Municipal Solicitors :—

- (1) Whether any, and if so, what charge (other than the charge of Rs. 15 per connection and the charge of Re. 1 per month for meter rent) was leviable by The B. E. S. & L. Co. Ltd. from consumers of electrical energy during periods when in fact no energy was consumed by them, and
- (2) Whether the expression "per quarter" as used in the Fourth Annexure to the License and in the Proceedings of the Corporation, meant a quarter of a year reckoned from 1st January, 1st April, 1st July or 1st October, or meant any three consecutive months commencing from any date in the year?

The Municipal Solicitors, after examining the provisions of the Electricity Acts of 1903 and 1910, as also the clauses of the Bombay Electric License, and the Deed of Concession, came to the conclusion that the prices authorised by the 4th Annexure to the Electric License were for the amount of energy *supplied* and not energy which, though available, was not availed of, or consumed, could be held to be energy supplied, because the *amount* could not be ascertained unless it passed through a consumer's meter and was in fact consumed. The resolution of the Corporation in 1905 was therefore *ultra vires* and there was no power to levy any charge beyond the charge of Rs. 15 for connection and the charge of Re. 1 per month for meter rent whether in fact no energy was consumed.

Their answer to the second question was that the "quarter" meant any continuous period of three months and not necessarily three consecutive calendar months.

The Municipal Commissioner forwarded all the papers to the Corporation on the 30th March 1917 for their consideration. The Corporation by their Resolution of 19th April 1917 referred the matter to the Tramways Committee for report.

On the 16th May 1917 the Municipal Secretary on behalf of the Tramways Committee requested the Company to favour the Committee with its remarks regarding the dispute in question. By a strange coincidence, a letter of the same date was received from Government stating that the Company were charging consumers of electrical energy a minimum rate *per mensem* which was not sanctioned by the Municipal Corporation nor by Government. The License allowed a minimum rate per *quarter* provided there was an actual consumption of energy. In other words if there was no consumption of energy in the course of a quarter, the Company was not entitled to charge anything. Mr. Rimington construed the Government letter broadly and replied as follows:—

1. " We shall duly comply with your rulings that consumers whose minimum consumption of electrical energy falls below 40 units per quarter of three consecutive months shall be charged at a rate not exceeding the minimum rate authorised to be charged, in that event, by our License ;
2. " That the charge made shall be by the quarter and not by the month ; and
3. " That when no consumption whatever has taken place, no charge, except that for meter rent, shall be levied."

The following three questions were raised by the Tramways Committee, *viz*:—

- (1) Whether the Company is justified in making a minimum charge *per mensem* of Rs. 3 when the actual cost at tariff rates of the amount of electrical energy consumed falls short of that sum ?
- (2) Whether the Company is authorised in making any charge to the consumer, except meter rent (and the original connection fee), when in any one month or quarter no consumption of energy has taken place ?
- (3) Whether the Corporation acted *ultra vires* in passing a Resolution in 1905, authorising the Company to charge a minimum charge of Rs. 9 per quarter under the circumstances described in (2) ?

Mr. Rimington, by his letter of 14th June 1917, replied to the Municipal Secretary that :—

- (1) He accepted the view that the Company's License did not authorise the imposition of the minimum charge on a monthly basis but only upon a quarterly basis of assessment.
- (2) He also accepted the contention that there was nothing in the Indian Electricity Act or in the Rules made under that Act or in the License authorising a minimum charge per quarter when in fact no energy was consumed.
- (3) He proceeded to remark that as the Government and the Municipal Solicitors had held the Resolution passed by the Corporation in 1905 as *ultra vires*, it would cease to be operative in case the Corporation accepted and acted upon that view. He added that pending a fresh agreement being arrived at between the Corporation and the Company, the Company would adopt the legal minimum charge of Rs. 20 per quarter, sanctioned by the License, when the consumption of electrical energy by any consumer fell below 40 units during any quarter. As the License authorised a charge of Rs. 20 in the above event, he submitted that, having regard to all the circumstances, a fair settlement of the matter would be that in future the charge should, in the event in question, be 6 annas per unit consumed. For many reasons this proposed charge by the unit, in the cases in question, seemed to him preferable, as well as more advantageous to the consumer than the imposition of a fixed minimum charge. He therefore requested the Municipal Secretary to submit his proposal for the approval of the Tramways Committee.

As all the points including the meaning of the term "quarter" (which was accepted as opined by the Solicitors) were settled by now, the Tramways Committee requested Mr. Rimington, and he agreed, to accept the rate at 5 annas per unit in the event of the quarterly consumption of electrical energy supplied falling short of 40 units. The Tramways Committee accordingly recommended the Corporation to pass a fresh resolution, and if the arrangement was accepted by them to inform Government of it.

At a meeting of the Corporation held on the 3rd September 1917, the above recommendations were adopted and the Company was authorised to charge a rate of annas 5 per unit for the supply of electrical energy in cases in which the consumption for any quarter fell below 40 units. This arrangement was accepted by Government by their letter of the 4th December 1917.

1925.

Since the above method of charging was approved by the Corporation, very few complaints were received from our consumers. The majority, it appears, learnt the rule and used energy in such a way that they did not come within the provisions thereof.

In 1924 and 1925, three of our consumers complained to the Municipality that the above system of charging was inequitable and absurd inasmuch as that by consuming 35 units per quarter, a consumer was required to pay Rs. 10-15 whereas if he consumed 40 units he would have had to pay only Rs. 10 at the tariff rate. The case was still worse if he consumed 39 units per quarter in which case he had to pay Rs. 12-3, *i.e.*, more than he had to pay if he consumed 48 units.

The matter was referred by the Corporation to the Tramways Committee, who, after careful consideration, recommended that the Company be requested not to charge more than Rs. 10 to all consumers who consumed electrical energy between 33 and 39 units in a quarter.

The above report was approved and adopted by the Corporation on the 27th July 1925, and it was given effect to by the Company from the 1st October 1925. This arrangement continued up to 1935.

1935.

When reductions in the rates of lighting and fans were made from 1st September 1935, the Quarterly Minimum Charge was also reduced as follows :—

If any consumer uses less than 33 units in any one period of 3 months, all the units consumed by him during such period will be charged at annas 4½ per unit instead of annas 5 per unit the present charge. Consumers using 33 to 40 units in any one period of 3 months will be billed a fixed charge of Rs. 9 instead of the existing charge of Rs. 10.

NOTE:—1. We now charge Rs. 8 for connecting an installation instead of Rs. 15 as stated in the foregoing paragraphs.

2. The monthly meter rental was reduced from Re 1 to eight annas from the 1st July 1920.

3. Under the Indian Electricity Act, 1910, amended in 1922, Clause 11A of the Schedule thereto now reads :—

“A licensee may charge a consumer a minimum charge for energy of such amount and determined in such a manner as may be specified by his license, and such minimum shall be payable notwithstanding that no energy has been used by the consumer during the period for which such minimum charge is made.”

In this connection, the General Manager in his letter of the 1st December 1924 to the Municipal Secretary says: --

“ Up to the present this Company has not sought to take advantage of the new statutory powers conferred upon it, nor does it now desire to do so. Although the Company loses revenue thereby, we prefer the arrangement approved by the Corporation because it is more equitable.”

CHAPTER 20.

The Bombay (Hydro-Electric) License, 1907.

In 1906, a company was formed in Bombay, financed entirely by Indian capital, to develop electrical energy through water storage in the Western Ghats and supply it to the spinning and weaving mills and other power users in Bombay. This enterprise, the sponsors of which were Messrs. D. J. Tata and R. J. Tata, the members of the famous firm of Tatas, was started with a capital of 175 lakhs of rupees, or approximately a million and a quarter sterling, and its potential influence upon the industries of the greatest manufacturing city in India was supposed to make it of commanding importance. No country in the world was better adapted for the development of hydro-electric works than India. The art of water storage was understood here, and had been brought to a high pitch of perfection by the irrigation department of the Government of India. Immense quantities of water were impounded for irrigation purposes, and the great perennial rivers having their origin in the Himalayas provided enormous potential sources of power that were running to waste.

The Bombay Scheme was an entirely novel one as far as India was concerned, but it appeared to possess the elements of success. Some 50 miles from the city are the Western Ghats. The rain-laden currents, as they come up from the south-west during the monsoon season—from June to October—impinge against the barrier, and discharge much of their aqueous burden before they pass on to the more arid tableland which is called the Deccan. Here, at Lonavla, now a pleasant hill-station and an important place on the line of the G. I. P. Railway, it was proposed to store water in large reservoirs. From these reservoirs, by a flume and penstocks leading to Khopoli, at the foot of the Ghats, a fall of nearly 1,800 feet would be obtained. Here the turbines and generators were to be erected in sets of 10,000 h.p. each, generating current at a pressure of 80,000 volts. A transmission line 43 miles long was to be constructed to lead to the transformer stations on the outskirts of Bombay, where the current was to be stepped down to the requirements of consumers, and thence delivered to the mills and factories as required.

An application dated the 28th February 1906 was, therefore, made by Messrs. Dorabjee Jamsetjee Tata and Ruttonji Jamsetji Tata as Agents for Messrs. Tata & Sons, under the Indian Electricity Act, 1903, to the Government of Bombay for a license to supply electrical energy to the public for all purposes in the City and Island of Bombay. A notice of this application was published in the local papers on the 5th March 1906 and the objections respecting thereto were required to be brought before the Government before the 5th June 1906.

The matter was discussed by the Committee of the Corporation on the 11th May 1906, whereat the Chairman, Sir Pherozeshah M. Mehta, assumed that they wished and intended to act up to their engagements contained in Clause 1 (c) of the Deed of Concession.

A petition was forwarded by the Company to the Secretary to Government, Public Works Department, Bombay, on the 1st June 1906 strongly opposing the granting of the said License upon *inter alia* the following grounds :—

1. That during the short time of three months at its disposal (the Company commenced to supply electrical energy only in November 1905) the Company had done everything that could be done to establish and develop the supply of electrical energy in the City and Island of Bombay.
2. That it could not be suggested that the supply agreed upon under the terms of the License of the Company (*viz.*, for all purposes throughout the whole area at rates subject to negotiation) could not be provided by it nor that its financial or engineering resources were in any way inadequate for that purpose.
3. That the Company had expended in acquiring the Tramways and in laying down mains and carrying out works for the supply of electrical energy a sum exceeding one hundred and twenty-six (126) lakhs of rupees and had arranged to spend further sums amounting to about ninety-six (96) lakhs of rupees in further developing the undertaking, all subscribed by the Shareholders and Bondholders.
4. That Clause 6 of the Hydro-Electric License provided as follows :—

“ 6. Save as herein provided, the licensees are empowered by this license to supply energy to the public for all purposes ; provided that except for the purposes of any factory within the meaning of the Indian Factories Act, 1881, the licensees shall not supply energy for the purpose of lighting or fans to any consumer who shall not contract for an aggregate supply for lighting, or for lighting and fans combined, or for lighting and fans and power combined, equal to at least 150,000 units per quarter of a year.”

- 5 That it was necessary for the Company supplying electricity to have a sufficient amount of plant and machinery installed to meet special occasions when all the lamps and fans were used
- 6 That the Load Factor for domestic lighting seldom exceeded 10 to 15 per cent in any district and was only brought up to even that percentage by the help of larger customers such as hotels theatres and similar establishments
- 7 That the proposed License avowedly aimed at depriving this Company of the large customers for power and light and limited the supply to the long hour consumers namely to those who would give a good Load Factor only
- 8 That the Company was prepared to show that if the proposed License was not granted to the applicants it could and would give all the supply required throughout the whole area at a price that would meet all reasonable demands
9. That the only effect of granting the said license would be to duplicate the capital expended in the district for the same purpose to duplicate the working expenses by having two undertakings instead of one and in so far as the new scheme should prove successful in taking away from the existing Company the long hour customers make it impossible for that Company to give a cheap supply for domestic purposes
- 10 That the Company had always looked forward to the supply of electrical energy to Mills Manufactories and other large consumers of power as promising to constitute the most important department of its business
- 11 That it seemed almost incredible that when the ink on the Company's License was hardly dry when it could not in any way be alleged that it had failed to carry out its obligations another Company should be able with any prospect of success to apply for a rival license affecting and involving precisely the same area. It could hardly be contended that it would be reasonable to grant a license on the same day for the same area for two competing companies. It was less than reasonable or right to allow a Company to start its operation on an extensive scale with an extremely heavy capital outlay and then without any cause whatsoever to give another Company the promise of admission a few months later thereby rendering the outlay of the first Company abortive and jeopardising the enterprise of its shareholders with a heavy loss
- 12 That it was highly problematical whether electricity generated by water power as proposed by the applicants could be supplied in bulk at a lower rate than electricity generated by the latest developments of steam plant at the command of the Company
- 13 That if there was really a *bona fide* belief on the part of the applicants that by means of hydraulic power they could

supply in bulk at a lower cost than would be remunerative to the Company, it should obviously be to the mutual interest of both the Company and the applicants that the latter should obtain the custom of the Company. Yet, under the second part of clause 11 of the applicants' license they had specially guarded themselves against this obligation. This clause alone was sufficient to ensure the license being refused. Clause 11(2) ran as follows :—" The Licensee shall not be under obligation to supply energy for the purpose of enabling another Licensee to supply such energy to the public for power purposes."

14. That the Company had entered into contracts with the Municipality, with the full knowledge and approval of Government, incurring heavy obligations to render valuable services to it and to the city which it was bound to discharge. The rival Company had not incurred similar burdens and was free from any corresponding obligations.
15. That under Clause 1 (c) of the Deed of Concession, the Municipality formally bound itself to " take all proper steps and use their best endeavours to prevent competition in any area to which any such license " (*viz.*, " for supplying electricity for the purposes of light, heat, motive power and industrial and other proper objects ") " may extend." This engagement had been duly endowed with Governmental as well as Municipal validity and that the granting of the proposed license would be a direct breach thereof.

The Company, therefore, before taking any further steps in the matter of the proposed license, requested the Government to order a local enquiry as provided for in Rule 8 of the Rules issued under the Indian Electricity Act, 1903, affording the Company an opportunity of setting forth in detail its objections to the granting of the said license. (Rule 15 of the Act of 1910).

On the 19th July 1906, a further representation in continuation of the above was made by Mr. Rimington on behalf of the Company. The gist of it was :—

- (a) that before a local enquiry was held, the Government should be satisfied of the practicability of the proposed scheme from an engineering point of view and whether the promoters were in a position to finance and carry out the undertaking within a reasonable period.
- (b) that unless the Government was so satisfied, the Company would be involved in considerable expense to prepare its case and the expenditure thus made would be premature and unnecessary.
- (c) that the Company, in case the Government decided to grant the license, be afforded the opportunity, at the enquiry applied for, of submitting amendments to the clauses of the draft license.

Dr. Accacio G. Viegas, who was then the President of the Municipal Corporation, also addressed a letter to Government on behalf of the Corporation on the 26th July 1906, protesting against the grant of the license to Tatas. He added that if a license was granted to the applicants, they should not be allowed to place their aerial transmission lines within the limits of Bombay Island ; to pay to the Corporation a reasonable rent for the use of the public streets just as the Tramway and Telephone Companies were doing ; to assure to the Corporation unconditional right of purchase in the event of revocation of such license by Government ; and to enable the Corporation to obtain a supply of energy from the licensees for public purposes at a special rate which should not exceed one anna per unit.

To our representations to Government, a letter No. D-298 of 1906 dated the 14th November 1906 was received from the Hon. Mr. W. H. Whyte, C.E., Secretary to Government, Public Works Department, rejecting our demand for a local enquiry on the ground that the Government considered our objections vexatious in as much as it was obvious that Government could not be precluded from sanctioning the introduction of cheap electricity to Bombay. Government considered that there could be no monopoly whatever, and that the only question open to discussion related to the precise terms of distribution, *viz.*, the details in reference to conditions on which the power should be supplied to the public.

On the 26th November 1906, the Board in London presented a petition to the Secretary of State for India, praying him to take such steps as were necessary to restrain the Bombay Government from taking any action in furtherance of the grant of the powers applied for by the Tatas until an enquiry into the whole scheme had been held and determined as contemplated by the Indian Electricity Act and the Rules made thereunder.

It will be seen from the above that our objections were with regard to Clauses 6 and 11 of the proposed license and certain other matters. Consultations and discussions between Mr. Rimington and Dr. John Mannheim, the representative in India of the Hydro-Electric Syndicate, were in the meanwhile going on in Bombay. Similar negotiations were also in progress in London between the Directors of the Company and Mr. Alfred Dickinson, representing Messrs. Tata & Sons. On behalf of the Government Mr. Whyte, the Secretary, Public

Works Department, was appointed to hear the representations of both parties and to act as Arbitrator between them. § Charles Ollivant and Mr. E. Garcke, two of the Directors, arrived in Bombay in connection with this affair on the 4th and 27th January 1907 respectively. A private communication was received by Sir Edward Sassoon, the Chairman of the Board in London, from the India Office, informing him that the Government of Bombay had been asked by telegram as to how the matters stood, with an indication that the enquiry should precede any issue of a license. The Board also pressed upon Mr. Rimington to address without any loss of time a petition on similar lines to the Government of India, unless the Government of Bombay granted a statutory enquiry. As, however, the terms of the disputed clauses were settled between the above named parties, no representation was sent to the Government of India.

The principles on which the settlement was arrived at were as follows :—

The Chief Secretary, who was appointed by the Local Government to hear the representations of both Companies and to act as Arbitrator between them, ruled that Government would not be justified in depriving the Cotton Mill Industry of Bombay of the advantages of the prospective cheap hydro electric supply, but provided that was secured, and the right of the Railways to a supply from the same source should they decide to avail themselves of it, Government recognised the injustice of allowing a new Company to invade the sphere of supply operations secured by its License to the existing Company on the faith of which that Company's Capital had been subscribed. This was an attitude towards the situation which the Company acquiesced in as just and reasonable to the various interests involved, and the subsequent discussions were based upon the acceptance of that principle.

SETTLEMENT.

Ultimately it was ruled by the Secretary to Government that Government should be recommended when issuing the Tata Hydro-Electric Supply Company's License that its powers to supply should be restricted in Clause 6 to :—

- (a) Other Licensees for their own purposes and in bulk.
- (b) Factories within the meaning of the Indian Factories Act, 1881, and to any Railway previously approved by the Local Government ; provided that the Licensees shall not supply any such Factory or Railway as aforesaid unless such Factory or Railway, as the case may be, shall require *not less than 500,000 units per annum*, such amount being the *bona fide* average computed annual consumption of such Factory or Railway.

This ruling was accepted by both parties, and was in due course accepted and gives effect to by the Government of Bombay and by the Government of India.

For the further protection of our Company the following words were also introduced into the same clause, *viz.*, 6 :—

“ And provided that no supply by the licensees under the powers contained in Sub-Section (b) shall be open to question as between the licensees and the Bombay Electric Supply & Tramways Co., Ltd., if the licensees shall have given previous notice in writing to the B. E. S. & T Co., Ltd., of their intention to make such supply and The B. E. S. & T. Co., Ltd., shall not for thirty days after delivery of such notice at their office in Bombay have objected in writing, and provided that The B. E. S. & T Co., Ltd., shall not be entitled to take any objection except upon the ground that the consumer intended to be supplied does not fall within the scope or does not fulfil the conditions of Sub Section (b). ”

Section 2 of the same Clause was worded as follows : -

“ For lighting —

The energy supplied under this License to any consumer for power may be used by such consumer for lighting his premises, provided that the energy used by such consumer for such lighting purposes shall not in any year exceed twenty per cent of the total amount of energy supplied to such consumer, and, save as aforesaid, the licensees shall not supply energy for lighting purposes except by agreement with The B. E. S. & T Co., Ltd. ”

Four new clauses were added in the License which was issued on the 1st March 1907, called “ The Bombay (Hydro-Electric) License, 1907.” Clause 11 (2) was altogether omitted from the License.

Clause 17 runs as follows : -

“ 17 The licensees shall not generate energy otherwise than by water power for the purposes of the supply contemplated by this license, provided that they may use other power for subsidiary purposes not being in substitution for or augmentation of Hydro-electric generation ”

THE ANDHRA VALLEY (HYDRO-ELECTRIC) LICENSE, 1919.

An application was made on the 2nd November 1916 to Government by the Tata Hydro-Electric Power Supply Co., Ltd., for a License under the Indian Electricity Act, 1903, for the supply to the public of electrical energy for power and lighting. The terms of this new License were published in the papers on the 8th November 1916.

In so far as our Company was concerned the terms of the new License differed in several very material points from those of the Hydro License of 1907. These alterations were :—

- (a) In Clause 6 (b) of the 1907 License the right to supply was specifically restricted to Factories and Railways with a minimum annual consumption of 500,000 units.

In the new License this restricting annual minimum consumption was lowered to 125,000 units.

- (b) In the same clause the words " And provided that no supply does not fulfil the conditions of sub-section (b) " were deleted.
- (c) In Section 2 of the same Clause the important words " and, save as aforesaid, the licensees shall not supply energy for lighting purposes except by agreement with The B. E. S. & T. Co., Ltd., " had been deleted.

All these alterations, it was thought by our Company, had been designed with the express purpose of empowering the Hydro Company, or its assignees, (who were to be the Andhra Valley Power Supply Co., Ltd.) to depart from the settlement with our Company arrived at in 1906 and to invade to our prejudice the sphere of operations which was then by the decision of Government conserved to us. A memorial was, therefore, submitted by the Company to the Bombay Government on the 10th November 1916, protesting against the above alterations being sanctioned by Government, their object, it was stated, being to enhance the profits of the Tata Hydro-Electric Power Supply Co., or its assignees, at the expense of our Company. The effect of alteration (a), the memorial proceeded, if sanctioned by Government, would be to enable the holders of the new License by a campaign of underbidding our Company's power supply rates (which were approved and sanctioned by the Municipal Corporation) to endeavour to deprive it of the smaller industrial power consumers (namely, consumers whose consumption was below 500,000 units per annum) who were taking supply from us. If successful, the effect of this deprivation would be to take away from us a considerable source of revenue, and to injuriously lower our day-load which was of great importance to us because it would also injuriously lower our load and diversity factors at our Power House and consequently enhance our generating costs for the whole of our electrical output.

The effect of alteration (b) was considered to be to deprive our Company of the right of protest should the holders of the new License supply consumers whose consumption was below the minimum at which supply by them was authorised.

The effect of alteration (c) appeared to be designed to enable the holders of the new License to supply energy, without the consent of our Company, for electric lighting to consumers other than consumers who took power supply from them within the limitations of the License.

Government were, therefore, requested to restrict the terms of the new License to the same terms as those settled by Government for the License of 1907.

Copies of the above memorial were also sent to the Municipal Commissioner on the 2nd January 1917, expressing a very earnest hope that the Corporation would support our protest against the infringement of the rights heretofore secured to the Company.

On the 12th March 1917, the Corporation by their letter No. 7921 over the signature of the Hon. Mr. Chunilal V. Mehta, its President, forwarded to the Bombay Government, also protested.

The alterations made in the new draft License and objected to by us were rectified in the License issued by Government on the 1st day of April 1919, as "The Andhra Valley (Hydro-Electric) License, 1919."

CHAPTER 21.

Supply of Electrical Energy in Bulk.

After the Tata Hydro-Electric Works were started in 1911, the question of taking supply from the Hydro Company for a portion of our requirements engaged the attention of Mr. Rimington. Finally, an agreement, which came into force from 1st January, 1916, was entered into between the Hydro Company and our Company on the 15th April, 1915, with the following conditions :—

Conditions of Supply Supply to be given to us by the Hydro Company under two sets of conditions

- A. At Esplanade Sub-station transformed to our H. T. pressure between 5-45 p.m. and 5-45 a.m. only, the maximum demand being limited to 3,000 K.W., and a maximum consumption of 300,000 units per annum being guaranteed by us.
- B. At three points in the North of the Island
 - (1) Kingsway Depot transformed to our H.T. Pressure, Maximum Demand 750 K.W.
 - (2) Moon Mills at the Hydro Company's Pressure, Maximum Demand 250 K.W.
 - (3) Parel Tramway Terminus at the Hydro Company's Pressure, Maximum Demand 250 K.W.

The supply at these three points to be for our entire requirements over the whole 24 hours, subject however to aggregate Maximum Demand at all three points of 500 K.W. between 5-45 a.m. and 5-45 p.m. and 1,000 K.W. between 5-45 p.m. and 5-45 a.m.

Rate :—The rate per unit delivered under the above conditions to be 0.5 anna per unit

Period of Agreement :—The agreement to run for ten years, subject however to termination by us of either the A or B supply or of both, after the first five years, upon payment to the Hydro Company of a sum representing the unamortised portion of their Capital Outlay on the Mains and Transformers installed in connection therewith.

The amounts agreed as applying to termination at various periods were :—

Date of Termination.	Compensation Payable.	
	Supply A.	Supply B.
	£.	£.
At the end of 5 years	1,600	500
“ “ 6 “	1,280	400
“ “ 7 “	960	300
“ “ 8 “	640	200
“ “ 9 “	320	100

A further agreement was arrived at between ourselves and the Tata Hydro Company on 24th January, 1917, by which the Hydro Company agreed to give us day supply between the hours of 6 a.m. and 5-45 p.m. at Esplanade Sub-Station up to 1,500 K. W. at 0.45 anna per unit for the same period as that for night supply and on the same terms, *mutatis mutandis*, as the Agreement of 1915. It was, however, agreed that our combined consumption of day and night supply at the above Sub-Station should not fall below 900,000 units per annum. This agreement was modified by a Supplemental Agreement executed on the 24th October, 1917, by which the number of Kilowatts for day supply was sought to be reduced by half and in the event of our new generating set being delivered at Bombay in course of the year, the same was to be reduced to 500 K.W. However, from the 4th January, 1918, we were, at our request, permitted to modify the above agreement and to take up to 1,500 K.W. in all during the day time.

In 1918, the Tata Hydro Company was in a very serious plight on account of the shortage of water in their lakes. The Tatas, therefore, applied to us and we agreed to give them supply of electrical energy from 10th January 1919 till 15th June 1919, at the rate of .75 anna per B.T. Unit. The Hydro Company was released from giving supply to our Company under the existing agreements.

1920.

On 20th July, 1920, the following letter was addressed to the Tata Hydro-Electric Power Supply Co., Ltd. :—

“ Owing to our having difficulty in getting sufficient trucks to deliver our coal supplies at present, we wish to enquire whether it would be possible for you to increase the day maximum demand taken at our Esplanade Sub-Station under our present agreement

with you, from 500 K.W., to say 1 000 K.W. or 1 500 K.W. The increased demand would be required between the hours of say 10 a.m., and 5-45 p.m. The load would be practically steady throughout the whole period. As this increased consumption will improve the load factor of your supply to us, we hope that you will be able to supply the extra demand at the same rates as under our existing agreement, i.e. 45 anna per unit."

The reply of the Tatas was that they would let us have the increased power at the Esplanade Sub-Station, subject to its being discontinued at any time without notice. The rate for the excess power would be 6 anna per unit. As we were under the agreement of 24th October 1917, entitled to 500 K.W. at this Sub-Station at the rate of 45 anna per unit, arrangements were sought to be made for apportioning the total load according to the two different rates.

This was confirmed by our letter of the 22nd July 1920 which was as follows:—

"We are in receipt of your letter No. 2082/20 of the 21st instant, informing us that you are prepared to temporarily supply us with an additional 1 000 K.W. during the day time at our Esplanade Sub-Station at a rate of 6 anna per unit where under our present agreement with you, we are already allowed to take 500 K.W. at a rate of 45 anna per unit.

"This offer was put before our Board at their last meeting and was accepted by them. I would suggest the method of calculating the number of units to be charged at the respective rates of 45 (under present agreement) and 6 anna (under temporary arrangement) to be as follows:—To calculate the units at 45 rate. The maximum demand of 500 K.W. permitted under present agreement be multiplied by the hours during which the supply is taken each day and this number of units be deducted from the total registered by the meters for the day; the remaining units to be charged at 6 anna—the rate stipulated in the temporary arrangement.

"We propose to start taking supply from Friday morning, the 23rd instant."

On 14th March, 1921, the Managing Director forwarded a circular to the Directors on the subject of 'Future Generation Policy', wherein he stated that the most economical alternatives for the Company would be:—

- (1) to take its entire supply from a Hydro Company, or,
- (2) to generate its entire supply by steam except some small portion of hydro supply taken in out lying districts where we

had no cables and for the purpose of cutting down the Power House evening peak load ; or,

- (3) to take between 30 and 40 million units of hydro supply and generate the balance of our required output with steam plant.

On the general aspects of the balance of advantage between our generating with steam or taking hydro supply, Mr. Rimington stated :—

“ Under the circumstances which obtained up to some 3 or 4 years ago my strong preference would have been for the former. It is a very distinct advantage to have our generation entirely under the control of our own staff. It is also an advantage to have the source of our supply located in Bombay and not dependent on transmission over 40 miles of overhead cables. Lastly, with steam generation we could formerly look forward (provided the price of coal remained fairly stable) to a progressive diminution in our generation costs as our load expanded and as we were in consequence able to install larger and more efficient generating sets. That this situation is changed to-day is amongst the countless evil results of the war. It has materially altered because in the last few years the cost of coal has doubled, the cost of steam plant trebled or quadrupled, and the value of money and difficulty of raising it substantially increased. Looking at the situation as it now presents itself, and especially to the uncertainties attaching to the future cost of coal ; the risks of interruptions in its delivery arising from not improbable political or industrial disturbances ; the necessity of a heavy, unavoidable, and continuous capital expenditure on extensions of mains and tramway lines to keep pace with the prospective development of the city and my consequent reluctance to recommend a further expenditure in course of the next year to two of some forty-five lakhs on the Power House if avoidable, I should feel impelled to favour resorting to hydro supply provided (1) we were assured that we could not and in the future rely upon obtaining a supply commensurate with our requirements ; (2) obtain that supply at a cost not in excess of the estimated cost by steam generation.”

As regards the first alternative, from what he knew of the position of the Hydro Companies, Mr. Rimington regarded it extremely improbable that they could submit proposals on the basis of contracting for a supply commensurate with our entire existing and prospective output. He was, therefore, of the opinion that no firm offer should be entertained by the Board except on the basis of (1) delivery to us in course of next year on the scale of up to fifty million units per annum with satisfactory guarantees to cover the annual prospective growth of our demand ; (2) a rate per unit not above .65 anna per unit delivered on our side of our transformers ; (3) a contract for a minimum period of twelve years renewable, at our option, on same terms for a further period of fourteen

years so as to carry us on to the end of the first term of our Concession with the Municipality.

Regarding the second alternative, it was estimated that the capital expenditure required for new plant to meet the estimated demands on the Power House of the Company for the next five years, when erected, would amount to 45 lakhs of rupees. The cost of the steam generated unit would then have been between .7 to .883 anna due to the fluctuation in prices of coal.

With regard to the third alternative, the combined steam and hydro supply was estimated to cost between .71 and .74 anna per unit.

The matter was then discussed with Mr. Gibbs, the representative of the Tata Company and ourselves, and Mr. Gibbs was able to inform the Board that the lowest rate and conditions on which the Hydro Group could offer a supply of energy in bulk, rising from 60 million units at a maximum demand of 20,000 Kilowatts in 1923 to 120 million units at a maximum demand of 40,000 Kilowatts in 1933, would be : —

A Standing Charge of Rs. 50 per Kilowatt of sustained maximum demand per annum, *plus* a Running Charge of annas 0 425 per unit. Accounts to be settled monthly. Maximum demand on special holidays not to be taken into account. Energy to be supplied at our High Tension Voltage and to be metered at the various points of supply agreed upon, namely Kussara, Esplanade, Kingsway, Lal Bagh, Mahim.

The Board by their Resolution No. 245, dated the 30th August, 1921, accepted this offer and instructed the Management to negotiate a draft agreement embodying the guarantee required by them.

After many amendments in the draft Agreement, it was finally settled and executed on the 21st February 1923, the main points of which are as follows : —

*Conditions of supply :—*We to take from the Hydros, as from the date from which they were in a position to give, a supply of electrical energy in bulk, sufficient to meet all requirements of the Company and equal to not less than one-half of the estimated demand for each individual month at Points 1 and 2 and not less than one-third of the estimated demand

for each individual month at Points 3, 4, 5 and 6 as set out in the fourth column of the Schedule given below :—

Location	Date of Supply during the year.	Limit of Demand.	Estimated Monthly Consumption during the year.
		K W.	
<i>Point 1.</i> Kussara Power House.	1923	9000	1.5 Million.
	1924	9000	1.5 ..
	1925	9000	2.3 ..
	1926	9000	2.3 ..
	1927	9000	2.75 ..
	1928	17700	4.42 ..
	1929	18900	4.73 ..
	1930	20100	5.02 ..
	1931	21300	5.32 ..
	1932	22500	5.61 ..
<i>Point 2</i> Esplanade Sub Station	1923	3000	0.5 Million.
	1924	3000	0.5 ..
	1925	3000	0.5 ..
	1926	3000	0.5 ..
	1927	3000	0.5 ..
	1928	5500	1.76 ..
	1929	5600	1.79 ..
	1930	5700	1.82 ..
	1931	5800	1.85 ..
	1932	5900	1.88 ..
<i>Point 3</i> Lalbagh Sub Station	1923	200	0.04 Million.
	1924	250	0.05 ..
	1925	300	0.06 ..
	1926	375	0.08 ..
	1927	450	0.11 ..
	1928	3200	0.70 ..
	1929	3550	0.76 ..
	1930	3900	0.84 ..
	1931	4250	0.91 ..
	1932	4600	1.00 ..
<i>Point 4.</i> Suparibagh Sub-Station	1923	300	0.06 Million.
	1924	350	0.07 ..
	1925	425	0.08 ..
	1926	500	0.10 ..
	1927	575	0.12 ..
	1928	650	0.14 ..
	1929	725	0.15 ..
	1930	800	0.17 ..
	1931	875	0.19 ..
	1932	950	0.2 ..

Location	Date of Supply during the year	Limit of Demand	Estimated Mon- thly Consumption during year	
			K W	B T U
<i>Point 5.</i>	1923	2000	0 32	Million
Kingsway Sub-Station	1924	2000	0 37	"
	1925	2000	0 42	"
	1926	2000	0 42	"
	1927	2000	0 42	"
	1928	3750	1 33	"
	1929	4200	1 49	"
	1930	4650	1 65	"
	1931	5100	1 81	"
	1932	5550	1 97	"
<i>Point 6.</i>	1923			
Mahim Sub-Station	1924	50	005	Million.
	1925	100	01	"
	1926	150	015	"
	1927	200	02	"
	1928	250	025	"
	1929	300	03	"
	1930	350	035	"
	1931	400	04	"
	1932	450	045	"

In accordance with the provisions in the Agreement to that effect the Tatas asked for (13th July 1932) and we sent them (4th August 1932) the following schedule showing the limit of demand and the estimated monthly unit consumption at each point of supply for a further period of five years :-

Location	during the year	Demand	during year	
			K W	B T U
<i>Point 1.</i>	1933	22500	5 61	Million.
Kussara	1934	22500	5 61	"
	1935	22500	5 61	"
	1936	22500	5 61	"
	1937	23000	5 81	"
<i>Point 2</i>	1933	10000	1 88	Million.
Esplanade (including Palton Road)	1934	10500	1 91	"
	1935	11000	1 91	"
	1936	11500	1 94	"
	1937	12000	1 94	"

Location.	Date of Supply during the year.	Limit of Demand.	Estimated Monthly Consumption during year.
		K. W.	B. T. U.
<i>Point 3.</i> Lalbagh.	1933	4600	0.28 Million.
	1934	4600	0.31 "
	1935	4600	0.34 "
	1936	4600	0.37 "
	1937	4600	0.40 "
<i>Point 4</i> Suparibagh	1933	1500	0.20 Milhon.
	1934	1600	0.20 "
	1935	1700	0.21 "
	1936	1800	0.22 "
	1937	1900	0.23 "
<i>Point 5.</i> Kingsway	1933	5500	0.48 Million.
	1934	5500	0.51 "
	1935	5500	0.54 "
	1936	5500	0.57 "
	1937	5500	0.60 "
<i>Point 6.</i> Mahim	1933	750	0.10 Milhon.
	1934	850	0.11 "
	1935	950	0.11 "
	1936	1050	0.12 "
	1937	1150	0.12 "

The Aggregate ultimate demand by the Company upon the Hydros up to 25 years, 220 million units per annum. We informed the Tatas in 1932, that this would remain the same within the next 25 years commencing from 1933.

Commencement of supply at the first point not later than 1st May 1923, and at the remaining points not later than 1st January 1928.

Rate:—Up to the termination of the Agreement dated the 15th April 1916, the rate specified therein, viz., 5 anna per unit. Under the 1923 Agreement Rs. 50 per annum per kilowatt of maximum demand *plus* .425 anna per Board of Trade Unit of actual consumption.

Period of Agreement:—For 15 years from 1st May 1923, and thereafter at the option of the Company for a further period of 10 years if signified in writing five years prior to the

expiration of 15 years. The Agreement to run from year to year after the first 15 years or after the extended period of 25 years. In either case either party to give at least 4 years notice to terminate the Agreement.

The Company was advised that the sanction of the Local Government was necessary before the Company could undertake the supply of electrical energy for lighting purposes at a pressure of over 5,000 Volts. The General Manager, therefore, addressed two letters on the 22nd March 1923, to the Joint Secretary to Government, Public Works Department, Bombay, (1) for the amendment of the Bombay Electric License, 1905, and (2) for the amendment of the Bombay Electric Traction License, 1907.

The Government sanctioned the amendments of the Licenses on 5th and 29th February 1924, respectively. The notifications were published in the Official Gazette of 7th February and 6th March 1924.

The following are the effective dates from which we began to take supply from the Tata Hydro Company :—

Esplanade Sub-Station	..	8th September, 1916.
Kingsway Sub-Station	..	18th May, 1917.
Dadar Sub-Station	..	1st January, 1919.
Lalbagh Sub-Station	..	19th March, 1919
Suparibagh Sub-Station	..	22nd October, 1919
Kussara Sub-Station	..	22nd August, 1924
Mahim Sub-Station	..	April, 1928

As the Andhra Valley Company, Ltd., required money in connection with the extension of their existing plants, an assurance was given by us on 19th April 1922, that this Company would within a period of six months advance to them a loan of Rs. 25 lakhs. This amount was paid to the Tata Company in two lots of Rs. 10 and 15 lakhs on the 27th July, 1922 and 29th May 1923, respectively, on the strength of two promissory notes passed by them.

When the three Hydro Companies, viz. The Tata Hydro Electric Power Supply Company, Limited, The Andhra Valley Power Supply Company, Limited, and the Tata Power Company, Limited, with a view to extend water and plant capacity of the Hydro Electric System floated the Kundley Valley Company in 1924, the latter Company issued debentures

of the value of Rupees One Crore. The advances of Rs. 25 lakhs made by our Company on demand notes were converted into 2,500 bearer Debentures (Nos. 1 to 2500) of the face value of Rs. 1,000 each of the Kundley Power Company, Limited. The period in which the Debentures were repayable was 15 years. The Kundley Company, however, undertook after five years from the date of issue to redeem debentures worth two lakhs annually by drawing lots; such redeemed debentures were not to be re-issued.

In June 1927, the Company received an offer from Messrs. Batlivala and Karani, Brokers, for the purchase at par of Rs. 12½ lakhs of the above debentures, the Brokers having the option of purchasing the balance of Rs. 12½ lakhs at the same rate within 3 months from the date of acceptance of the first offer to purchase Rs. 12½ lakhs brokerage at the rate of ¼%. The Board accepted this offer and the debentures of the whole amount of Rs. 25 lakhs were delivered in two lots of Rs. 12½ lakhs each on the 14th June and 12 August 1927 respectively.

It was thought that the Companies forming the Hydro Group for the supply in bulk of all the electrical energy required for our undertaking would not be able to furnish us power for a few years from 1923. The Hydro Group, was, however, able to advance its programme and arrangements were made to take the whole supply from these sources in January 1925. Our Steam Generating Station at Kussara was shut down on 11th January 1925 and arrangements were made for the disposal and writing off of this plant over the period covered by the existing License with a view to its extinction from the Balance Sheet by 1947. (See Chapter 17 Supra.)

Discussion with the Hydro Group for a revision of the 1923 Agreement was initiated in 1928 in the hope of reaching a fresh arrangement which would enable us to make electricity more generally available to the public than heretofore. Sir Purshotamdas Thakurdas, while presiding at the thirteenth Ordinary General Meeting held on the 12th April 1933, spoke as follows in this connection :—

“Some of you may ask why we are taking this action now— why should we not wait until 1935 or 1936, when, if we were to contem-

plate a power station, definite action would be imperative. The answer is twofold, our Company has grown so gradually, and we have for so many years been able to finance extensions without calling on the shareholders that probably many of you do not appreciate its magnitude. We have a capital, including debentures, of Rs. 460 lakhs, a block including goodwill of Rs. 589 lakhs and an average annual revenue of Rs. 157 lakhs over the past 10 years. We now rank amongst the great electric supply and transportation corporations. With interests of this size we have to look well ahead. We have to decide and the sooner the better, whether we shall contemplate our own power station and modify our financial policy accordingly; we have to decide whether we shall concentrate on the distribution of electricity to the best advantage of the shareholders and consumers or dissipate our energies in generation when we have an inexhaustible supply at our disposal from other sources. There is a further consideration. Under the terms of their licenses the Hydro Companies are not bound to supply us or any other party with energy in excess of 500,000 units per annum for re-sale to an individual consumer. We have in justice to the Hydro Companies to recognise that they have never pressed this restriction unduly against us. We are carrying a considerable number of consumers whose annual demand is in excess of this limit and derive substantial revenue therefrom. But you will readily see that this restriction must be a source of considerable difficulty in practice. It is impossible for an industrialist exactly to forecast his requirements. If the clause were arbitrarily interpreted a consumer might be compelled to switch from us to the Hydros, or *vice versa*, as the consumption rose or fell in relation to this limit. Under the head of agreement Hydros have foregone this right, the rates of the two Companies interlock, and the general consumer will be free to purchase electricity from us no matter what his demand may be, if it is to his advantage to do so. We regard this as a most valuable consideration quite apart from the other solid benefits in the suggested agreement, and one of great service in extending the use of electricity in Bombay. Such, gentlemen, are the essentials of the understanding which we have reached. It is in the best advantage of your Company and City. It secures to us all the advantages of a power station of our own, without the risk attendant thereon. It secures to us a fair protection rate, in the event of power station costs being inflated at a time when they would have to be faced. It guarantees freedom of action to B. L. S. F. in its selling policy without the difficulty and harassing restrictions in the Hydro licenses. Above all, it enables us to concentrate on what should be our main business, the selling of electricity, without the entanglements of a power station and the discharge of our debenture debt and consolidation of our liquid resources."

After protracted negotiations and lengthy discussions, differences were finally settled and an Agreement was executed on the 23rd May 1935. The principal provisions of this Agreement are as follows :-

Period of Agreement :—The Agreement of 21st February 1923 to continue up to 30th April 1938 as stipulated therein. The Agreement of 1935 to come into force from 1st May 1938 and to continue up to 7th August 1947 and in case neither the Government of Bombay nor the Municipal Corporation of Bombay exercise their option to purchase the undertaking in 1947, then the Agreement to continue for a further period of three years, that is, up to mid-night of 7th August 1950.

Conditions of Supply :—Energy in bulk, without limit, as required by the Company, to be supplied by the Hydro Companies at all the six points mentioned in the 1923 Agreement and also at a new point on the Back Bay Reclamation when mutually arranged.

Rate of Supply :—At the option of the Company, to be signified to the Hydro Companies on or before the 30th April 1938 to pay at one or other of the following rates :—

- (1) The cost of thermal generation estimated as on the 30th day of April, 1938, or
- (2) Rs. 4 per month per Kilowatt of maximum demand *plus* .3 anna per B. T. Unit of actual consumption.

If the Company does not elect to signify its option on 30th April 1938, as aforesaid, the rates mentioned in the second alternative will prevail.

The cost of thermal generation shall be the estimated cost on 30th April 1937 (to be agreed or assessed) of electrical energy delivered to the outgoing feeders from a Thermal Power Station assumed to be located at Company's Kussara Basin, Bombay, or other agreed site, adjusted to the cost of electrical energy delivered at the actual points of bulk supply.

CHAPTER 22.

Public Lighting.

1921.

The Executive Engineer, Bombay Municipality, sent to us on 5th July, 1921, a set of plans showing 47 *Street Junctions* that were proposed to be lit by electric lamps. The total number of lamps to be provided for was 156 made up as follows :—

13	..	1,000	candle power units.
85	..	500	" "
58	..	250	" "
156			

" Of these 54 will be on lamp-posts and 10 on span wires of suitable dimensions to be supplied by you and others on existing tram-poles. Roadside lamps will all be on ornamental brackets projecting not more than 5 feet from the kerb line in the case of 250 c.p. and 500 c.p. lamps and not less than 6 feet in the case of 1,000 c.p. ones. Centre lamps will be in suitable holders fixed on the top of lamp-posts except where brackets are specified. Generally the height of the bulb should be about 25 feet from the level of the road."

The Executive Engineer also asked for an estimate showing separately the initial charges and maintenance charges together with whatever suggestions the Company had to make regarding the details.

On the 14th September, 1921, the Deputy Managing Engineer replied to the Executive Engineer, Municipality, that after careful consideration the Company was prepared to undertake the lighting of the street lamps on the following terms and conditions :—

" The service connections to supply mains to be made under the same conditions as those pertaining to ordinary House Services. All Capital Expenditure beyond the service cable shall be paid for by the Corporation at cost price plus 7½ per cent, which we may state for your information is estimated at Rs 32,714. The yearly lighting hours shall be approximately 3,890. That the contract shall not be for a less period than five years.

“ The annual running costs to be made up as follows :—

“ 250 *c.p. Lamps*.—Current Rs. 60-12-0, lamp renewals Rs. 24-12-0, maintenance 10 per cent. on Capital Cost of installation other than service costs plus Rs. 5-0-0 for cleaning and switching estimated in all Rs. 24-8-0. Total annual cost Rs. 110-0-0 per lamp.

“ 500 *c.p. Lamps*.—Current Rs. 121-8-0, lamp renewals Rs. 32-0-0, maintenance, lighting and cleaning Rs. 24-8-0. Total annual cost Rs. 178-0-0 per lamp.

“ 1000 *c.p. Lamps*.—Current Rs. 243-0-0, lamp renewals Rs. 46-0-0, maintenance, cleaning and switching Rs. 24-8-0. Total annual cost Rs. 313-8-0 per lamp.”

1922.

The Standing Committee accepted the above conditions of our offer on 12th April, 1922, and the work was proceeded with.

On 28th April, 1922, conversation took place between the Municipal Commissioner, the Executive Engineer, Municipality, and Mr. Moberly regarding lighting electrically lamps on certain tramway poles in various streets, and after some correspondence between our Company and the Municipality, the Corporation accorded their sanction to the scheme, the conditions of which were as follows :—

- (1) That our quotation for Junction Lighting contained in our letter of 14th September, 1921, be cancelled and the rates per lamp be increased as follows :—

250 *c.p.* lamp from Rs. 110-0-0 to Rs. 120-0-0 per annum.

500 *c.p.* lamp from Rs. 178-0-0 to Rs. 200-0-0 per annum.

1,000 *c.p.* lamp from Rs. 313-8-0 to Rs. 350-0-0 per annum.

These revised rates to cover 4,050 lighting hours per annum per lamp.

- (2) All lamps must burn all night. Our rates not to cover switching off at mid-night. If any lamp was not lighted for the period of one whole night, the rates at which such deductions worked out were :—

250 *c.p.* annas $2\frac{3}{4}$ for the period of one whole night.

500 *c.p.* annas $5\frac{1}{2}$ for the period of one whole night.

1,000 *c.p.* annas 11 for the period of one whole night.

No deductions to be allowed in respect of lamps which failed during the night or for a short portion of the night.

- (3) Service connections to be made on the same condition as appertain to ordinary House Services.
- (4) The contract to run for a period of seven years.
- (5) All capital expenditure incurred beyond the cost of service cables indicated in (3) above to be refunded to the Company by the Corporation at actual cost plus $7\frac{1}{2}$ per cent.

"Energy from our existing distributing mains would be supplied to each of these lamps individually. 750 watts half-watt lamps would be erected on alternate tramway poles on either side of the road, and each would be controlled by a separate switch. The fittings would be of the bracket unit type complete with $8\frac{1}{2}$ " HOLOPHANE prismatic band refractor the whole being enclosed in a glass bowl. The fittings would be supported from bracket arms of suitable length mounted on the tramway poles. We have assumed that centre poles will be replaced by side poles in Grant Road."

On 13th October, 1922, the Executive Engineer informed us that two contracts were required to be entered into : (1) one for the execution of the work of installation, and (2) the other for the maintenance of the lamps. He sent us a copy of the first wherein the particulars and specifications of the various lamps and their appurtenances were to be entered. The other contract was to be prepared by the Municipal Solicitors.

The General Manager replied as follows on 16th December, 1922, regarding the first contract :—

"Referring to your letter No. E.R. 6/A dated 13th October 1922, in which you ask us to complete the usual Municipal Tender and Contract forms for the installation of the Street Lighting fixtures, we have the honour to request you to excuse us from entering into this formal procedure.

"We are not Contractors in the usual sense of the term, and are making a special exception to our usual procedure by undertaking this work with a view to obhging the Municipal Corporation.

"If necessary, our letter quoting the estimated rates may be taken as binding."

1923.

Although such a contract was required to be executed by Sections 70 (1) (b) and 71 of the Municipal Act, in view of the fact that we were not contractors in the usual sense of the term and the procedure was somewhat cumbersome, the Municipal Commissioner by his letter of 28th May, 1923, did not propose to press the matter further especially as the

work was well on the way to its conclusion, but reported the fact of our desire not to enter into a formal contract to the Standing Committee for their information with which they agreed.

We commenced lighting public lamps at various places on the following dates :—

36 lamps on 1st August, 1923.

36 lamps on 1st September, 1923.

24 lamps in October, 1923.

25 lamps in November, 1923.

4 lamps in December, 1923.

8 lamps in January, 1924.

1 lamp in March, 1924.

1 lamp in April, 1924.

135

Complaints were received by us from certain persons that the light of our electric lamp-posts erected near their houses came straight into their bed-rooms. They, therefore, asked us to cover the light with a shade. As the lamps were the property of the Municipality, they agreed to defray the expenses of fitting the glare guards.

Negotiations and conferences followed and finally the draft of the agreement was settled. The contract for Public Lighting was executed on 27th October, 1927, although the period began to run from 1st March, 1924.

The above contract expired on 28th February, 1931, and a fresh contract from 1st March, 1931, for a period of five years was executed on 16th November, 1932.

The number of street lights connected on 31st December, 1935, was 1,337 for the whole night and 96 for half the night.

CHAPTER 23.

Electrification of Salsette.

On the 13th July, 1922, the Director of Development inserted in the " Times of India " a notification to the effect that he would be prepared to receive proposals upto 1st October 1922, for a license for the supply of electricity in Salsette for lighting and power purposes including traction.

After considering the question in all its bearings, the Board decided by their Resolution No. 528 of 16th August 1922, not to apply for any license for the supply of electricity to Salsette.

PART IV

MISCELLANEOUS.

CHAPTER 24.

Provident Fund.

The Management of the Company were, first in 1905 and then in 1908, willing to allow such of the salaried staff, as desired to participate in the British Electrical Superannuation Fund by becoming contributing Members thereof. But the matter was dropped as none of the staff felt disposed to join the Fund.

The advisability of forming a Provident Fund was considered in 1910, but the proposal did not fructify till 1913, when the proposed terms and conditions of the proposed fund were drawn up and ultimately approved by the London Board.

The draft Rules of the Fund as sanctioned by the Board were placed before representatives of the staff in Bombay. All the officers present expressed the opinion that the introduction of the Fund would prove a great boon to them and to all the employees of the Company. A Provident Fund was accordingly instituted from the 1st of January 1914. The Rules were printed in English, Marathi and Gujarati and circulated to the whole of the Company's staff.

1918.

Contributions to the Fund were retained in the Company's business and the Company annually paid interest at the rate of $4\frac{1}{2}$ per cent. per annum on the balance at credit of that Fund. Mr. Rimington recommended that, having regard to the very attractive terms of the War Loan which was then announced, it was desirable to invest the balance at credit of the Fund in that Loan at $5\frac{1}{2}$ per cent. interest. The matter was discussed by the Board and on 19th June 1918, they resolved that the balance at credit of the Fund should remain invested in the business of the Company, but that the rate of interest paid by the Company on that balance be increased from $4\frac{1}{2}$ per cent. to $5\frac{1}{2}$ per cent. per annum from 1st July 1918.

A petition having been made to the Managing Director by the officers and clerical staff of the Company on the 24th January 1919, the Board "Resolved that from the 1st January 1919 the rate of the Members' and the Company's contributions be raised to 8½ per cent. of their monthly salary, the increased scale being made compulsorily applicable only to officers and employees of the Company whose salaries exceed Rs. 100 per mensem; and being optional in the case of employees with lower pay. Further, that from the same date the Company's contributions to the Fund be made monthly."

1921.

Gratuities.—In order to further improve the terms of service granted by the Company, the Directors sanctioned the regulations enabling the employees to qualify for retiring gratuities after long and faithful service (2-2-1921).

In view of the enactment of the Indian Income Tax (Provident Funds Relief) Act XII of 1929, it was decided to transfer the fund to Trustees under this Act. Eventually, on 8th April 1931, the Board decided, as from 1st May, 1931, to have the amount of the Provident Fund separated from the Company's business and transferred to a Trust. The following were trustees of the Fund :—

Director Trustee	..	..	Mr. A. G. Gray.
General Manager	..	..	Mr. C. N. Moberly.
Secretary	..	..	Mr. P. D. Mahaluxmivala.
Traffic Manager	..	..	Mr. F. Aulton.

Mr. A. S. Trollip, Deputy General Manager, was added as a trustee in 1932.

The Trustees of the Fund then applied to the Commissioner of Income Tax, Bombay, on 21st April, 1931, for the recognition of the Fund under the Act of 1929. This was accorded on 20th June 1931, and the recognised Provident Fund came into existence with effect from 1st May 1931.

CHAPTER 25.

List of Directors.

Form 2nd August 1905 to 31st March 1916 in London.

Name of Director.	Date of Election.	From	To	REMARKS.
Sir Edward Sassoon, Bart., M.P.	....	2-8-1905	7-5-1912	Chairman. Resigned Chairmanship 24-11-1911. Resigned Directorship 7-5-1912. Died May 1912.
Sir E. C. K. Ollivant, K.C.I.E.	....	2-8-1905	31-3-1916	Chairman from 24-11-1911.
Emile Garcke, Esqr.	....	2-8-1905	31-3-1916	
C. Shurreff B. Hilton, Esqr.	....	2-8-1905	31-3-1916	
F. C. Rimington, Esqr.	....	2-8-1905	31-3-1916	Managing Director.
F. W. Chanter, Esqr.	17-1-1906	17-1-1906	31-3-1916	
Sir Walter Hughes, C.I.E.	24-5-1910	25-5-1910	31-3-1916	
A. T. Cooper, Esqr.	5-9-1913	5-9-1913	31-3-1916	Appointed Consulting Engineer of the Company in London from 1-4-1916 to 31-12-1923. Appointed Consulting Engineer and London Agent from 1-1-1924.

Directorate transferred to Bombay on 1st April 1916.

LIST OF DIRECTORS—*contd.*

From 1st April 1916 to 31st December 1935.

Name of Director.	Date of Election.	From	To	REMARKS.
Sir Sassoon David, Bart. ..	....	1- 4-1916	14-10-1926	Chairman. Died in 1926.
Sir Shapurji B Bharucha, Kt. ..	....	1- 4-1916	30- 6-1920	Died in 1920.
Sir Ibrahim Rahumtooia, G B. E., K C S I., C I E	1- 4-1916 Re-elected on 18- 4-1923	1- 4-1916 18- 4-1923	6- 3-1918 24- 1-1931	Resigned. Resigned.
	Re-elected on 8- 2-1934	22- 2-1934		
J. S. Wardlaw Milne, Esqr. ..	....	1- 4-1916	22- 2-1918	Resigned.
Sir Arthur H. Froom ..	12- 4-1916	12- 4-1916	31- 3-1926	Resigned.
F. C. Rimington, Esqr. ..	12- 7-1916	12- 7-1916	30- 4-1922	Managing Director. Resigned 1922.
Sir Stanley Reed, Kt, K.B.E, LL.D. ..	6- 3-1918	6- 3-1918	31-12-1923	Appointed Financial and Administrative Adviser from 1st January 1924. Resign- ed on 13-12-1934.
	Re-elected on 13-12-1934	13-12-1934		

LIST OF DIRECTORS—contd.
From 1st April 1916 to 31st December 1935.

Name of Director.	Date of Election	From	To	REMARKS.
Sir Fazulbhoj Curimbhoy Ebrahim, Kt., C B E.	27- 3-1918	27- 3-1918	30- 9-1933	Resigned.
R D Tata, Esqr.	7- 8-1918	7- 8-1918	7- 9-1926	Died in 1926.
Malcolm Hogg, Esqr	30- 4-1919	30- 4-1919	26-11-1919	Resigned.
Sir Chunilal V Mehta, K C S I	30- 4-1919	30- 4-1919	12- 1-1921	Resigned.
F E. Dinshaw, Esqr	Re-elected on 4-11-1932 30- 6-1920	24-11-1932 30- 6-1920	3- 1-1936	Died on 3-1-1936.
Sir Purshotandas Thakurdas, Kt., C I E, M B E.	9 2-1921	9- 2-1921		Chairman from 11-11-1926
Sir Kikabhai Premchand, Kt	13- 7-1921	13- 7-1921		Debenture Director.
F C Annesley, Esqr	14- 1-1925	14- 1-1925		
A G Gray, Esqr	14- 1-1925	14- 1-1925		
Sir Nowroji B Saklatvala, Kt, C I E	14-10-1926	14-10-1926		

CHAPTER 26.

List of Heads of Departments.

MANAGEMENT I.

Names.	Date of Joining.	Designations.	From	To	On 31-12-35 Yrs. M.
Rimington, F. C.	.. 2- 8-1905 B. T. Co. 1884	.. MANAGING DIRECTOR	.. 2- 8-1905	.. 30- 4-1922 Died : 17- 3-1935	.. 16-8. B. T. Co. 21
Cooper, A. T.	.. 1-12-1905	.. CHIEF ENGINEER .. Managing Engineer	.. 1-12-1905 .. 1-12-1908	.. 30-11-1908 4- 9-1913 Resigned. 31- 3-1916 31-12-1923	.. 7-10.
		.. Director (London) .. Consulting Engr. in London .. CONSULTING ENGR., & LONDON .. AGENT	.. 4- 9-1913 .. 1- 4-1916 .. 1- 1-1924	.. 31- 3-1916 .. 31-12-1923	..
Baker, C. D.	.. 29-6-1905 Brush Co. 2- 8-1905 B.E.S.T.	.. ASST. ENGINEER .. First Asst. to Chief Engr. .. Deputy Engr. (Supply) .. JOINT MANAGING ENGINEER	.. 29- 6-1905 .. 1- 7-1906 .. 1- 7-1909 .. 1- 1-1911 .. 5- 9-1913	.. 30- 6-1906 .. 30- 6-1909 .. 31-12-1910 .. 4- 9-1913 Died. 30- 5-1919	.. 19-9. 14-11. ..

MANAGEMENT—*contd.*

Names.	Date of Joining.	Designations.	From	To	On 31-12-35 Yrs. M.
Moberly, C. N. ..	13- 7-1905 Brush Co. 2- 8-1905 B.E.S.T.	CHARGE ENGR. POWER STN. ..	2- 8-1905	30-11-1906	..
		Overhead Supdt. ..	1-12-1906	30- 4-1908	..
		Traction Supdt. ..	1- 5-1908	31-12-1910	..
		Dy. Engineer (Tramways) ..	1- 1-1911	4- 9-1913	..
		Jt. Mg. Engineer ..	5- 9-1913	31- 5-1919	..
Trollip, A. S. ..	23-11-1919			War Leave 1-11-1917 to 28- 2-1919	..
		Mg. Engineer ..	1- 6-1919	30- 4-1922	..
		GENERAL MANAGER ..	1- 5-1922	7- 9-1935	30-2.
				Retired.	
		TECHNICAL ADVISER ..	23-11-1919	21- 6-1922	..
Mahaluxmivala, P. D. ..	16- 8-1885 B. T. Co. 2-8-1905 B.E.S.T.	Dy. Engr., Technical ..	22- 6-1922	21-12-1924	..
		Asst. Manager ..	22-12-1924	24- 3-1926	..
		Dy. General Manager ..	25- 3-1926	6- 9-1935	16-1.
		GENERAL MANAGER ..	7- 9-1935		..
		ASST. TO MG. DIRECTOR AND LOCAL ATTORNEY ..	B. T. Co. 2-8-1905	31- 3-1913	20-0 30-4.
		Asst. Secretary (Bombay)	1- 4-1913	31-12-1913	..
		Dy. Asst. Manager ..	1- 1-1914	31- 3-1916	..
		SECRETARY ..	1- 4-1916		..

SECRETARIAL II.

Names.	Date of Joining.	Designations.	From	To	On 31-12-33 Yrs. M.
Masani, A. M. ..	1- 3-1921 ..	ASSISTANT SECRETARY..	1- 3-1921 ..	31- 3-1931 Resigned. 1- 4-1931	10-0.
Kanga, R. D. ..	12- 3-1917 ..	Consumers' Dept. ..	12- 3-1917 ..	31-12-1927 ..	..
		Office Supdt. (Consumers)	1- 1-1928 ..	31- 3-1931 ..	18-9.
		ASST. SECRETARY ..	1- 1-1931 ..		
Moroba, D. Raut ..	1873 B. T Co. 2- 8-1905 ..	Bombay Tramway Co ACCOUNTANT ..	1873 2- 8-1905 ..	1- 8-1905 .. 31-12-1921 Died on 29-5-1931 }	32-0. 16-4.
	B.E.S.T.				
Pavri, P. D. ..	5- 7-1920 ..	General Assistant ..	5- 7-1920 ..	31-12-191 ..	..
		Deptl. Auditor ..	1- 1-1922 ..	31-12-1924 ..	..
		CHIEF ACCOUNTS OFFICER	1- 1-1925 ..		15-5.
Sawaram Mukundji ..	1886 B. T Co. 2- 8-1905 ..	CHIEF STOREKEEPER ..	2- 8-1905 ..	23- 4-1914 .. Died April 1914	8-9.
	B.E.S.T.				
Waman Narayan Barve ..	1902 B. T. Co. 2- 8-1905 ..	Asst. Storekeeper ..	1902 ..	- 4-1914 ..	..
	B.E.S.T.	CHIEF STOREKEEPER ..	- 4-1914 ..	- 5-1920 ..	14-10.
				Died May 1920	
Nanabbhoy J Mankame ..	15- 5-1914 ..	Asst. Storekeeper ..	15- 5-1914 ..	- 5-1920 ..	21-8.
		CHIEF STOREKEEPER	- 5-1920 ..		

ENGINEERING III.

Names.	Date of Joining	Designations.	From	To	On 31-12-35 Yrs M
DISTRIBUTION.					
Fowler, C. C. ..	.. 7-11-1911	.. DISTRIBUTION ENGR .. Dy. Managing Engr. .. CHIEF ENGINEER ..	.. 7-11-1911 .. 1- 6-1919 .. 22-12-1924	.. 31- 5-1919 .. 21-12-1924 .. 9-11-1927	.. 16-0.
Beatty, P. ..	.. 17- 6-1927	.. CHIEF ENGINEER ..	.. 17- 6-1927	.. 25- 5-1929 .. 1-11. (Service term- nated.	.. 1-11.
Puttick, A. W. ..	.. 1- 4-1913	.. MAINS SUPERINTENDENT Joined Army .. London Office .. Mains Engineer ..	.. 1- 4-1913 .. 23- 1-1916 .. 12- 4-1919 .. 1- 6-1919	.. 22- 1-1916 .. 11- 4-1919 .. 31- 5-1919 .. 2-12-1921	.. 22-9
Tresilian, A. S. ..	.. 27-11-1906	.. Dy Engr., Distribution DISTRIBUTION ENGR .. SUB-STATION SUPDT. ..	.. 3-12-1921 .. 26- 4-1929 .. 27-10-1906	.. 25- 4-1929 .. 31-12-1909 Resigned.	.. 3-2
Bennett, H. B. ..	.. 9- 5-1907	.. Charge Engr., Sub-stn .. Sub-station Supdt. .. Asst Dist Engr .. Joined Army .. Asst ENGR, SUPPLY ..	.. 9- 5-1907 .. 12-10-1909 .. 1- 4-1913 .. 1- 3-1915 .. 28-11-1919	.. 11-10-1909 .. 31- 3-1913 .. 28- 2-1915 .. 27-11-1919 .. 24- 7-1922 Resigned.	.. 15-2.
Osborne, H. C. ..	.. 9- 5-1907	.. CHARGE ENGR, SUB-STN Asst. Sub-station Supdt	.. 9- 5-1907 .. 12-11-1909	.. 11-11-1909 .. 25- 3-1910 Resigned.	.. 2-10
		Sub-station Engr .. SUB-STATION SUPDT ..	Re-engaged .. 1- 3-1913 .. 1- 5-1920	.. 30- 4-1920 ..	.. 22-10.

ENGINEERING—*contd.*

Names.	Date of Joining.	Designations.	From	To	On 31-12-35. Yrs. M.
MAINS.					
Bissett, E. J. ..	13- 2-1921 ..	MAINS FOREMAN	.. 13- 2-1921	.. 14- 2-1928 ..	14-10.
Marshall, C. R. ..	27-12-1919 ..	MAINS SUPDT. ..	.. 15- 2-1928	..	3-6.
		Asstt. Mains Engr.	.. 27-12-1919	.. 2-12-1921 ..	
		MAINS ENGINEER ..	.. 3-12-1921	.. 30- 6-1923 ..	
Dickins, C. V. S. ..	11- 1-1908 ..	Asst. Mains and Meter Supdt. ..	.. 11- 1-1908	Resigned.	16-0.
		Ag. Mains & Meter Supdt.	.. 1-10-1911	.. 30- 9-1911 ..	
		Meter Supdt. ..	.. 1- 5-1912	.. 30- 4-1912 ..	
		Ag. Mains Supdt. ..	.. 23- 1-1916	.. 22- 1-1916 ..	
		Asstt. Mains Supdt. ..	.. 21- 6-1919	.. 20- 6-1919 ..	
		Asstt. to Mains Engr.	.. 1- 1-1920	.. 31-12-1919 ..	
METER.					
Gray, P. V. ..	17- 8-1905 ..	Charge Engineer	.. 17- 8-1905	.. 16- 8-1906 ..	6-10.
		Meter Supdt.	.. 17- 8-1906	.. 31-12-1909 ..	
		Mains Supdt. ..	.. 1- 1-1910	.. 30- 6-1912 ..	
Sandwell, L. H. B. ..	1- 3-1919 ..	Meter Superintendent ..	.. 1- 3-1919	Resigned.	3-5.
			.. 31- 8-1922	.. 31- 8-1922 ..	
Price, W. ..	6- 1-1922 ..	METER SUPERINTENDENT ..	.. 6- 1-1922	Resigned.	14-0.
		ELECTRICAL, METER AND TESTING ENGINEER ..	.. 1-1-1930	.. 31-12-1929 ..	
TRANSPORTATION.					
Barrett, J. P. ..	9- 5-1907 ..	CHARGE ENGR. SUB-STN.	.. 9- 5-1907	Resigned.	18-1.
		Overhead Supdt. ..	.. 11- 6-1908	.. 10- 6-1908 ..	
		Asstt. Traction Supdt.	.. 16-11-1909	.. 14-11-1909 ..	
		Asstt. Engr., Traction	.. 1- 1-1914	.. 31-12-1913 ..	
		Engineer, Traction ..	.. 15- 5-1915	.. 14- 5-1915 ..	
		Construction Engr. ..	.. 1- 7-1920	.. 30- 6-1920 ..	
DY. ENGR., TRAMWAYS				.. 1- 7-1921 ..	.. 11- 6-1925 Died.

ENGINEERING—*contd.*

Names.	Date of Joining.	Designations.	From	To	On 31-12-35 Yrs. M.
Meyer, R. S.	.. 27-2-1914	DY. Asst. ROLLING STOCK SUPDT.	.. 27-2-1914	.. 31-7-1917	..
		Car Shed Supdt.	.. 1-8-1917	.. 11-6-1925	..
		Dy. Engr., Tramways	.. 12-6-1925	.. 25-4-1929	.. 21-10.
		TRANSPORTATION ENGR.	.. 26-4-1929	..	..
WORKSHOPS & CAR SHEDS					
Gosling, A. S.	.. 23-11-1919	TRAMWAY ENGINEER	.. 23-11-1919	.. 31-5-1922	.. 2-6.
				Resigned.	
Brooker, A. R.	.. 3-4-1908	Car Shed Asstt.	.. 3-4-1908	.. 31-10-1909	..
		Rolling Stock Supdt.	.. 1-11-1909	.. 10-6-1917	..
		WORKSHOP SUPDT.	.. 11-6-1917	.. 31-5-1920	..
				Service terminated.	.. 12-2.
Peel, B. W.	.. 1-2-1912	Rolling Stock Asst.	.. 1-2-1912	.. 10-6-1917	.. 23-11.
		Asst. Workshop Supdt.	.. 11-6-1917	.. 31-12-1919	..
		WORKSHOP SUPDT.	.. 1-1-1920	..	..
Adamson, G. W.	.. 27-12-1906	Car Sheds Supdt.	.. 17-12-1906	.. 31-10-1909	.. 2-10.
				Resigned.	
PERMANENT WAY.					
Pritt, T.	.. B T Co. 1-1-1900	RESIDENT PERMANENT WAY ENGINEER.	.. 1-1-1900	.. 30-6-1907	.. 7-6.
	.. B.E.S.T. 2-8-1905			Resigned.	

ENGINEERING—*contd.*

Names.	Date of Joining.	Designations.	From	To	On 31-12-35 Yrs. M.
Edulji, R. Billimoria ..	.. B. T. Co. 1885 .. B. E. S. T. .. 2-8-1905	ROAD SUPERINTENDENT	.. 2-8-1905	.. 29-6-1932 Retired.	.. 46-11.
Perry, D. S. ..	.. 1-2-1922	ASST. ROAD SUPDT. .. Asst. Engr. Roads .. ROAD SUPERINTENDENT ..	.. 1-2-1922 .. 1-1-1927 .. 1-7-1932	.. 31-12-1926 .. 30-6-1932	.. 13-11. ..
OMNIBUS DEPT. Pells, H. M. ..	.. 1-1-1927	ASST. ENGR., MOTOR VEHICLES.	1-1-1927	.. 31-10-1930 Service terminated.	.. 3-10.
Wright, F. ..	.. 30-7-1919	Charge Engr, Power Stn. Asst. Engr, P. S. .. Asst. Engr, Tramways .. Line Superintendent ..	.. 30-7-1919 .. 31-7-1922 .. 3-8-1923 .. 1-2-1926	.. 30-7-1922 .. 2-8-1923 .. 31-1-1926	 16-5.
SERVICE. Guilford, A. L. .. Spencer, C. ..	.. 7-5-1929 .. 18-12-1925	SALES MANAGER .. Asst. Engr, Distribution .. Asst. ENGR, DEVELOPMENT ..	.. 7-5-1929 .. 18-12-1925 .. 1-1-1929	 31-12-1928	.. 6-8. .. 10-0.
KUSSARA POWER STATION Wilkinson, A. R. ..	.. 17-2-1910	CLERK OF WORKS, KUSSARA POWER STN. .. Power Station Supdt. .. CONSTRUCTION ENGR. ..	.. 17-2-1910 .. 1-7-1911 .. 26-3-1926	.. 30-6-1911 .. 25-3-1926 .. Service terminated.	 18-10.

ENGINEERING—*contd.*

Names.	Date of Joining	Designations.	From	To	On 31-12-35 Yrs. M.
Colombi, J A ..	.. 10-10-1907 Brush Co. 1- 1-1912 B. E. S. T	.. Asst. POWER SYN. SUPDT	.. 10-10-1907	.. 31- 8-1921 Service terminated.	.. 13-10.
Simmons, J J ..	.. 1- 5-1917	.. CHARGE ENGR., POWER SYN Combustion Engineer .. Chief Asst. Engr., P. S. Production Engr .. Production Supdt ..	.. 1- 5-1917 .. 1- 2-1921 .. 1- 5-1922 .. 18- 3-1926 .. 26- 4-1929	.. 31- 1-1921 .. 30- 4-1922 .. 17- 3-1926 .. 25- 4-1929 .. 24-12-1933 Retired.	 16-8.
TECHNICAL					
Ayengar, T K R ..	.. 1- 7-1917	.. Asst. IN MAINS DEPT.. Asst Engr, Mains Dept Asst Mains Engr .. Mains Engineer .. Technical Engineer ..	.. 1- 7-1917 .. 1- 1-1921 .. 1- 7-1921 .. 31-12-1922 .. 1- 3-1929	.. 31-12-1920 .. 30- 6-1921 .. 30-12-1922 .. 28- 2-1929 ..	 18-6
PLANNING.					
Lazarus, E. G ..	.. 16- 9-1927	.. PLANNING ENGINEER ..	.. 16- 9-1927	..	.. 8-3.

TRAFFIC IV.

Names	Date of Joining.	Designations.	From	To	On 31-12-35 Yrs. M.
Ansell, E. T.	.. 1894 B.T. Co. .. 2- 8-1905 B.E.S.T.	TRAFFIC SUPDT.	.. 2- 8-1905 .. Service terminated on 31-12-1907	.. 31-12-1907 ..	.. 11-0.
Crisp, A. G.	.. 1878 B.T. Co. .. 2- 8-1905 B.E.S.T.	DEPUTY MANAGER TRAFFIC MANAGER	.. 5- 8-1905 1- 1-1908 ..	.. 31-12-1907 31- 3-1910 ..	.. 2-4. .. 27-0. .. 4-8.
Lucas, C.	.. 27-10-1907	ASST. to MG. DIRECTOR Dy. Manager and Traffic Manager	.. 27-10-1907 1- 4-1910 5- 9-1913 1- 3-1920 ..	.. 31- 3-1910 4- 9-1913 29- 2-1920 30-11-1927 ..	 20-1. ..
Quinn, H. C.	.. 3- 6-1910	ASSTT. TRAFFIC SUPDT. TRAFFIC SUPDT. TRAFFIC MANAGER	.. 3- 6-1910 3- 6-1913 1- 6- 1927 ..	.. 2- 6-1913 31- 5-1927 13- 7-1931 ..	.. 21-1.
Aulton, F.	.. 24- 9-1926	TRAFFIC SUPDT. TRAFFIC SUPDT. I TRAFFIC MANAGER	.. 24- 9-1926 1- 6-1927 5- 5-1931 ..	.. 31- 5-1927 4- 5-1931	.. 9-3.
Fraser, B. S. B.	.. 1- 8-1915	ASSTT. SUPPLY DEPT. " Traffic Accident Officer, " Asstt. Tr. Supdt. II	.. 1- 8-1915 1- 5-1917 1- 5-1918 1- 5-1921 ..	.. 30- 4-1917 30- 4-1918 30- 4-1921 31- 5-1927 ..	.. 20-4.
Agerup, H.	.. 28- 6-1912	TRAFFIC SUPDT. Asstt. Traffic Supdt.	.. 1- 6-1927 28- 6-1912 ..	.. 31- 5-1927 15- 9-1914 ..	 2-3.
Cartwright, R. B.	.. 9-10-1919	Asstt. Traffic Supdt.	.. 9-10-1919 ..	.. 31- 7-1926 ..	.. 6-10.
Weatherall, C. H. G.	.. B. T. Co. .. B.E.S.T. .. 2- 8-1905	Veterinary & Stable Supdt.	.. 2- 8-1905 ..	.. 30- 4-1908 .. Resigned.	.. 2-9.

CHAPTER 27.

List of Properties.

1. FREEHOLD.

Name of Property.	Situation.		Area.
Byculla	Parel Road, Opp	Victoria Gardens	2,390 sq. yds.
Colaba Land from G. I. P. Railway	Colaba Causeway	.. .. .	3,042 3/10 "
Colaba Land from Wadia Trust Settlement	Colaba Causeway	.. .. .	3,825 "
Kandewadi Sub-Station	Kandewadi Lane, Girgaum	.. .. .	131 "
Kussara Siding Property	Junction of Reay Road and Kussara Basin	.. .. .	452.46 "
Lady Hardinge Sub-Station	Junction of Lady Hardinge Road and Jamshedji Road N.S. No. 162 Part	Lady	164 "
Mahim (North) Sub-Station	Mahim bearing N.S. Nos. 87 & 84, Mahim Development Scheme No. 1	Mahim	127.11 "

1. FREEHOLD—*contd.*

Name of Property.	Situation		Area.
Mahim Receiving Station	..	Mahim N.S. No. 1590 (part)	966.58 sq. yds.
Mehta Sub-Station	..	Bomanji Lane	368.45 "
New Two Tanks Sub-Station (Duncan Road) ..	..	Duncan Road	356.3, 9 "
Ormiston Road Sub-Station	..	Ormiston Road (Accommodation Road) ..	143.5 "
Panjarahole	..	21'23, at the junction of Panjarahole Lane and Goghari Moholla, 1st Cross Lane	56 "
Parbhadevi Road Sub-Station	..	Junction of Cadell and Sayani Roads	66.09 "
Pulton Sub-Station (Development Dept.) ..	..	Plot No. 21 on Pulton Road Estate	390.7 "
Pydhowni	..	Pydhowni	About 80 "
Tardeo	..	Foras Road and Bapty Road	About 5,396 "
Telwadi Sub-Station	..	Telwadi Lane in Vithalwadi Street	563 "

2. LEASEHOLD.

Description of Property.	Situation.	LAND.			
		Name of Lessor.	Date of Lease.		Area.
			From	To	
Agripada Sub-Station	Agripada Street ..	Improvement Trust ..	11-2-1914 17-3-1923	11-2-2013 11-2-2013	25 sq. yds 25 "
Albert	Albert Road ..	Bombay Port Trust ..	1-4-1915	31-3-1965	128 "
Alexandra Docks "	Red Gate Docks ..	Bombay Port Trust ..	15-9-1935	14-9-1965	66 "
Apollo	Apollo Street ..	Mr. Jamshedji Kavasji Dubash	1-5-1904	30-4-1954	672 "
Arthur Road	Arthur Road, Chinchpoogly	Bombay Municipality	7-7-1924	6-7-1944	50 "
Atlas Mills	Atlas Mills Compound, Reay Road, Mazagaon.	Ahmed S. Moloobhai & M Gulamally Abdulhussein ..	1-12-1934	30-11-1964	33½ "
Baboola	Baboola Tank Road ..	Secretary of State for India in Council ..	14-6-1909	13-6-1959	71.11 "
Ballard	Ballard Estate ..	Bombay Port Trust ..	6-1-1932	5-1-1942	13 3/9 "
Bombay Port Workshops.	B. P. T. Workshops Yard ..	Do. ..	4-9-1935	3-9-1945	44 4/9 "
Breach Candy Sub-Station.	Warden Road ..	Bombay Municipality and others	1-4-1913	31-3-1948	50 "

2. LEASEHOLD—(contd.)

Description of Property.	Situation.	Name of Lessor.	LAND.		Area
			Date of Lease.		
			From	To	
Byculla Sub-Station ..	Byculla Club ..	Members of Byculla Club ..	7-8-1908 (39 years)	6-8-1947 Tenancy may be determined by lessors on giving 12 months Notice 13-2-1943	82 sq yds
Cama Baug ..	New Charni Road ..	Trustees of the Cama Baug Agiary	14-2-1923	19-9-1965	375 sq ft.
Carnac ..	Frere Road..	Bombay Port Trust ..	20-9-1935	16-1-2012	86 sq yds.
Chaupatty ..	Babulnath Road ..	Improvement Trust ..	17-1-1913	13-3-2918	99 "
Chinch Bunder ..	Chinch Bunder Road ..	" ..	14-3-1919	30-9-1936	295 "
Colaba Godowns ..	Colaba Causeway ..	Bombay Port Trust ..	1-10-1886		2195 6/9 "
					818 8/9 "
Colaba Offices, etc., land ..	Colaba Causeway ..	Secretary of State for India in Council	9-3-1883	8-3-2882	3014 5/9 "
Connaught Cross Road ..	Reay Road..	Bombay Port Trust ..	23-5-1919	22-5-1969	21,421.3.4,, 136 1/9 "

2. LEASEHOLD—(contd.)

Description of Property	Situation.	LAND			
		Name of Lessor	Date of Lease.		Area
			From	To	
Corner Sub-Station	Falkland Road ..	Trustees Ranji's Fire Temple	1-9-1921	31-8-1941	66 2 3 sq yds
Cotton Depot ..	Mazagaon-Sewri Reclamation, Cotton Avenue	Bombay Port Trust ..	1-5-1927	31-4-1977	44 4/9 ..
C P. Tank ..	Madhav Baug, C P. Tank Road	Trustees Madhav Baug ..	15-10-1912 27-12-1923 With option of renewal (1st for 25 years and 2nd for 20 years)	14-10-1937 26-12-1943	29 16 .. 30 22 ..
Dadar ..	Near Dadar Station	E S Gamat .. Now Dowager Lady Sakinabai Currimbhoy Ibrahim from 1-3-1933.	1-9-1918	31-8-1943	30 ..
Dhanraj Mahal ..	Apollo Bunder Road	Raja Bahadur Dhanrajgirji Narsingji.	1-1-1935	30-12-1964	13 4/9 ..
Dharavi ..	Dharavi Road ..	Mr. F. E. Dinshaw ..	1-10-1930	30-9-1945	25 ..
Dongersi ..	Dongersi Road ..	Bhawandas Narandas Motivala and others.	16-8-1927	15-8-1977	83.25 ..
Duncan Road ..	Near Two Tanks ..	Ranchhoddas Bhuvan Jivraj	1-3-1923	29-2-1948	55 ..

2. LEASEHOLD—(contd.)

Description of Property	Situation.	LAND.			Area.
		Name of Lessor	Date of Lease.		
			From	To	
Esplanade S. S with Quarters Service passage .. (Workshops) Falkland Road, S S.	Princess Street	Improvement Trust ..	7-6-1906	6-6-2905	1067 sq yds
	Do	Do do	23-6-1919	Month to month. 13-12-2911	285 "
	Golpitha ..	Do. do ..	14-12-1912		113 "
Falkland Road Latrine Under-lease	Do ..	B E S & T Co., Ltd, to Bombay Municipality ..	22-6-1916	11-12-2911	35.62 "
Ferguson East ..	Ferguson Road (Parel)	Hooseinally C a s u m Mahomed Mitha and Another	1-5-1925	30-4-1975	40 73 "
Ferguson West. S. S.	Ferguson Road, Worth Plot A	Improvement Trust ..	28-5-1924	27-5-2923	236 "
Framji Petit Mills..	Framji Petit Mills Com- pound, Magazine Street, Mazagaon	D. Tulsram & Co	1-5-1935	30-4-1965	50 "
Gamdevi Sub-Station	Gamdevi ..	Messrs Bhagwanji Morari Goculdas and Rajaram Morari Goculdas.	11-4-1931	10-4-1961	900 sq ft
Gowalia ..	Gowalia Tank Road (Near Kemp's Corner)	Morari Improvement Trust ..	1-1-1907	31-12-2005	83 sq yds

2 LEASEHOLD—(contd.)

Description of Property	Situation	LAND				Area
		Name of Lessor	Date of Lease		To	
			From			
Grant Road Sub Station (Plant removed)	Grant Road Corner	Haji Miva Abdulla Haji Miva Ahmed Khailwani Now Bai Rubaiyah, wife of Mahomed Yusuf Khailwani since 1932	1 1 1911	31 12 1960	Front 14 ft ,26 , Rear 18 , , x26	
Jacob Circle	Jacob Circle	Arthur Road Secretary of State for India in Council	1 9 1920 9 3 1926	1 9 1970	46.98 sq yds 101.53 , 148.51 ,,	
Jehangir Baug	Government Gate Road	Trustees N. M. Wadia Charities	1 11 1933	31 10 1943	331.13 ,,	
Khatam Makani	Byculla	Khatam Makani Spz. and Wg Co Ltd	1 1 1927	31 12 1936	28.02 ,,	
King Edward	Near Moon Mills, Enparitite Bombay Port Trust Road, Sewree		23 7 1934	22 7 1964	69 1/9 ,,	
Kingsway	Kingsway Dadar	Improvement Trust	30 6 1915	29 6 2014	42.889 ,	
Do	Talak Road Dadar	Improvement Trust by Municipality	18 11 1935	...	2 358 ,	

2. LEASEHOLD—(contd.)

Description of Property.	Situation	Name of Lessor.	LAND.		Area.
			Date of Lease.		
			From	To	
Kussara (Principal Lease)	Kussara Basin, Mazagaon	Bombay Port Trust	1-6-1911	31-5-1961	18,344 sq yds.
Kussara (Supplemental „)	Do.	Do.	15-3-1917	31-5-1961	482 „
Lal Baug	Lal Baug	Improvement Trust	5-10-1917	4-10-2016	315 „
Lamington Road	Junction of Foras and Lamington Road.	Rambhau Jankoji	1-2-1917	31-1-1947	About 27 1/4 „ (Two rooms) 900 sq ft.
Lamington Road (New) Foras Road, S S.	Foras Road	Sir Cowasji Jehangir Bart. & others.	9-1-1930	8-5-1938	50.6/9 sq yds.
Lowjee Castle	Govt Gate Road, Parel	Ardeshr Hormusji Wadia	1-9-1935	31-8-1949	44.4/9 „
Magazine Road	Mazagon Port Estate	Trust Alcock Ashdown & Co. Ltd	1-6-1927	31-5-1952	86.66 „
Mahim South S S	Gokhale Road South, Kumbharwada, Dadar.	Rustomji Cowasji Kavarana	1-2-1928	31-1-1958	331/3 „
Match Factory, Matunga	Parel Tank Road	Jafferbhoy Kanji	15-6-1926	14-6-1956	497 „
Matunga S S Quarters	Matunga	Improvement Trust	29-4-1920	28-4-2019	

2. LEASEHOLD—(contd.)

Description of Property	Situation	Name of Lessor	LAND		Area
			Date of Lease		
			From	To	
Mazagaon	Mrs. Rozario's Compound	Mrs. Rozario and Another	1 9 1916	31 8 1941	66 2 3 sq yds
Meher Mansion	Cooperage Road, Fort	Improvement Trust	9 9 1900	9 9 1999	1 517 "
Memowada	Saldnum Road	Do	7 4 1926	6 4 2925	144 "
Mogul	Sindhurst Road	Do	17 1 1913	16 1 2912	96 "
Mount Road	Mount Road	Bu Mumbai and Another In the hands of Mulji Ran- choodvel and Dubai Mul- ji Veda nov	16 3 1920	15 3 1940	69 4 9 "
Nangaum North	Nangaum Cross Road	Improvement Trust	6 7 1927	5 7 2926	168 "
Nangaum South	Plot No 74 Nangaum	Do	30 11 1925	29 11 2924	177 "
Nearpan	Nearpan Sea Road	Hosseinally Cassum Mitha & Another	7 1 1928	30 11 1958	71 1 9
Nesbit	Patel Road	Richardson & Cruddas	1 4 1924	Year to year 27 12 months notice	15' 15

2. LEASEHOLD--(contd.)

Description of Property.	Situation	LAND.			
		Name of Lessor.	Date of Lease.		Area.
			From	To	
Parel Road Sub-Station	Parel Road	Richardson & Cruddas	1-5-1914 (Continued after termination)	30-4-1930	22 2/9 sq yds.
Pedder Road	Pedder Road	Messrs Fazulbhai Ibrahim & Co, Ltd.	1-10-1929	30-9-2928	88.89 "
Raichur	Raichur Street, Elphinstone Estate	Bombay Port Trust	27-9-1933	26-9-1963	66.6/9 "
Ridge Road	Ridge Road, Lady's Gymkhana.	The Collector of Bombay	7-6-1934 (Renewable for a further period of 99 years)	6-6-2033	66.2/3 "
Sandhurst Road	New Queen's Road	Improvement Trust	27-9-1910	26-9-2909	318 "
Sandhurst Bridge S S	" Sri Pant Bhuvan", Sandhurst Road.	Mukundrao Dadajee Rane	1-7-1934	30-6-1964	11.5/9 "
Saraswati	DeLisle Road	Tokersi Jivraj & others	7-1-1927	6-1-1957	30.5/9 "
Saroj Movietone	Tank Road, Parel	Bai Bhikubai Chandulal	1-5-1935	30-4-1955	44 1/2 "
Sewree S S. (South)	Mazagaon Sewree Reclamation.	Bombay Port Trust	19-8-1932	18-8-1982	133.3/9 "

2. LEASEHOLD—(contd.)

Description of Property.	Situation	Name of Lessor.	LAND.		Area.
			Date of Lease.		
			From	To	
Ston North Plot A	Improvement Trust's Son Improvement Trust Mitunga Estate	Do	29-7-1927	28-7-2926	127 sq yds.
Ston South Plot B	Do	do	29-7-1927	28-7-2926	422 "
Sunderdas Saw Mill	Road Road	Bombay Port Trust	10-12-1925	9-12-1935 (Extended to 9-12-1945)	46 2 9 "
Suparibang Chawls	Suparibang Road	Improvement Trust	15-4-1921	14-4-2920	3,252 "
Suparibang Sub Station	Do	do	29-3-1919	28-3-2918	396 "
Surat	Port Road	Bombay Port Trust	1-10-1912	30-9-1937	528 sq ft
Sussex	Sussex Road	Improvement Trust	29-1-1920	28-1-2019	96 sq. yds.
Tardeo	Tardeo Fram Ternanus	Mineckji Pettit Mills	20-5-1918	19-5-1948	75.8 "
Two Tanks	Two Tanks	Haji Almahomed (assum)	1-5-1914	30-4-1939	32 41 "
Vellard	Hornby Vellard	The Bombay Cycle & Motor Agency Ltd	8-5-1924	27-12-1942	44 4/9 "

2. LEASEHOLD—(concl.)

Description of Property.	Situation.	LAND.			
		Name of Lessor.	Date of Lease.		Area.
			From	To	
Victoria Sub-Station	Victoria Road	Trustees of N. M. Wadia Trust Settlement Fund.	1-12-1925	30-11-1935 (Extended upto 30-11-1950)	Not specified.
Vincent	Vincent Road, Plot No 603A, Dadar-Matunga Estate	Improvement Trust ..	1-1-1925	31-12-2923	55 sq. yds.
Wadala	Wadala	Bombay Port Trust ..	29-7-1921	28-7-1971	136 1/9 "
Walkeshwar	Walkeshwar, opp. Govt House Gate.	Members of Walkeshwar Charities Committee	1-5-1909	30-4-1959	142 "
Wari Bunder	Wari Bunder Road	Bombay Port Trust ..	8-7-1913	28-2-1955	5706.23 "
Willingdon	Willingdon C l u b, Mahaluxmi.	Secretary, Willingdon Sports Club.	1-3-1925	28-2-1975	44 4/9 "
Wodehouse	Wodehouse Road	P D Chowna	1-7-1908	30-6-1958 (51 years).	66 "
Worli	Road No. 10, Worli	Improvement Trust ..	1-10-1925	Monthly tenancy.	25 "

CHAPTER 28.

Statistics.

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SCHEDULE A.
PREFERENCE SHARE CAPITAL.
CUMULATIVE PREFERENCE SHARES OF £10=Rs. 150 EACH RATING 6 PER CENT.

Year.	Authorised		Issued		Paid Up.			REMARKS.
	No. of Shares	Amount.	No. of Shares	Amount.	No. of Shares	Per Share	Total Amount.	
1905	60,000	Rs. 90,00,000	60,000	Rs. 90,00,000	60,000	Rs. 60	Rs. 36,00,000	
1906	60,000	90,00,000	60,000	90,00,000	59,855	90	53,86,950	
1907	60,000	90,00,000	60,000	90,00,000	145	60	8,700	
1908	60,000	90,00,000	60,000	90,00,000	56,771	150	85,00,650	
1909	60,000	90,00,000	60,000	90,00,000	3,329	90	2,99,610	
1910	60,000	90,00,000	59,992	89,98,800	59,947	150	89,92,050	
1911	60,000	90,00,000	59,992	89,98,800	53	60	3,180	
1912	60,000	90,00,000	59,992	89,98,800	59,942	150	89,91,300	8 shares forfeited
1913	60,000	90,00,000	59,992	89,98,800	50	90	4,500	
1914	60,000	90,00,000	59,992	89,98,800	50	150	89,95,800	
1915	60,000	90,00,000	59,992	89,98,800	59,992	150	89,98,800	
1916	60,000	90,00,000	59,992	89,98,800	59,992	150	89,98,800	
1917	60,000	90,00,000	60,000	90,00,000	59,992	150	89,98,800	
1918	60,000	90,00,000	60,000	90,00,000	60,000	150	90,00,000	8 shares reissued in 1917.
1919	60,000	90,00,000	60,000	90,00,000	60,000	150	90,00,000	
1920	60,000	90,00,000	60,000	90,00,000	60,000	150	90,00,000	Preference Share Capital up to date of reconstruction.

[Contd. on next page.]

SCHEDULE A—contd.

**COMPANY RECONSTRUCTED IN 1920 7 PER CENT.
CUMULATIVE PREFERENCE SHARES OF Rs. 50 EACH.**

Year.	Authorised		Issued and Paid Up.	
	No of Shares	Amount	No of Shares.	Amount
		Rs		Rs
1920	1,80,000	90,00,000	1,80,000	90,00,000
1921	1,80,000	90,00,000	1,80,000	90,00,000
1922	1,80,000	90,00 000	1,80,000	90 00,000
1923	1,80,000	90,00 000	1,80,000	90 00,000
1924	1,80,000	90,00,000	1,80,000	90,00,000
1925	1,80,000	90,00,000	1,80,000	90,00,000
1926	1,80,000	90,00,000	1,80,000	90,00,000
1927	1,80,000	90,00 000	1,80,000	90,00,000
1928	1,80,000	90,00,000	1,80,000	90,00,000
1929	1,80,000	90,00,000	1,80,000	90,00,000
1930	1,80,000	90,00,000	1,80,000	90,00,000
1931	1,80,000	90,00 000	1,80,000	90,00,000
1932	1,80,000	90,00,000	1,80,000	90,00,000
1933	1,80,000	90,00,000	1,80,000	90 00,000
1934	1,80,000	90,00,000	1,80,000	90 00,000
1935	1,80,000	90,00,000	1,80,000	90,00,000

SCHEDULE B.

ORDINARY SHARE CAPITAL.

Shares of £10 each
@ Exch. 1-4d.=Rs. 150.

1905 TO 1920.

Year.	Authorised.		Issued and Paid Up.			REMARKS.
	No. of Shares.	Amount.	No of Shares.	Paid up per Share excluding Premium.	Amount.	
		Rs.		Rs.	Rs.	
1905	60,000	90,00,000	14,507	150	21,76,050	
1906	60,000	90,00,000	27,007	150	40,51,050	
1907	60,000	90,00,000	34,357	150	51,53,550	
1908	60,000	90,00,000	60,000	150	90,00,000	
1909	60,000	90,00,000	60,000	150	90,00,000	
1910	60,000	90,00,000	60,000	150	90,00,000	
1911	60,000	90,00,000	60,000	150	90,00,000	
1912	60,000	90,00,000	60,000	150	90,00,000	
1913	60,000	90,00,000	60,000	150	90,00,000	
1914	60,000	90,00,000	60,000	150	90,00,000	
1915	72,000	108,00,000	72,000	150	108,00,000	(A)
1916	72,000	108,00,000	72,000	150	108,00,000	
1917	72,000	108,00,000	72,000	150	108,00,000	
1918	83,000	124,50,000	83,000	150	124,50,000	(B)
1919	83,000	124,50,000	83,000	150	124,50,000	
1920	108,000	162,00,000	108,000	150	162,00,000	(C)

NOTE.—

A—In 1915 by a Resolution passed by the shareholders at an Extraordinary General Meeting, 12,000 Ordinary shares were issued at £12/12 each. The premium £31,200 at Exchange 1/4 d.=Rs. 4,68,000 realised thereon was credited to General Reserve Fund Account

B—In 1918 by a Resolution passed by the shareholders at the Extraordinary General Meeting further 11,000 shares were issued at £20 each. The premium £1,10,000 at Exchange 1/4 d.=Rs. 16,50,000 realised thereon was credited to General Reserve Fund Account

C—In 1920 by a Resolution passed by the shareholders at the Extraordinary General Meeting, 25,000 shares were issued at Rs 500 each. The premium Rs. 87,50,000 realised thereon was transferred to General Reserve Account. On reconstruction of the Company, total amount to the credit of General Reserve Fund Account in respect of premiums received was utilised in issuing Bonus shares.

SCHEDULE D.
4½% FIRST DEBENTURE STOCK OF £100=Rs. 1,500 EACH.

Year.	Authorised, Issued and Paid up		Debentures purchased and cancelled.		Balance Amount.
	No. of Deb.	Amount.	During the year.	To date.	
		Rs	Rs	Rs	Rs.
1905	6,000	90,00,000	....	..	90,00,000
1906	6,000	90,00,000	..	..	90,00,000
1907	6,000	90,00,000	....	..	90,00,000
1908	6,000	90,00,000		....	90,00,000
1909	6,000	90,00,000	95,655	95,655	89,04,345
1910	6,000	90,00,000	79,500	1,75,155	88,24,845
1911	6,000	90,00,000			88,21,098
1912	6,000	90,00,000	3,747	1,78,902	88,13,595
1913	6,000	90,00,000	7,503	1,86,405	87,55,950
		90,00,000	57,645	2,44,050	
1914	6,000	90,00,000	Nil	....	87,55,950
1915	6,000	90,00,000	Nil	....	87,55,950
1916	6,000	90,00,000	2,91,000	5,35,050	84,64,950
1917	6,000	90,00,000	78,465		83,86,485
1918	6,000	90,00,000	3,000	6,13,515	83,83,485
1919	6,000	90,00,000	78,225	6,94,740	83,05,260*

*On reconstruction of the Company in 1920, the balance of Rs. 83,05,260 was fully paid up at Par. Redeemed in full.

[Contd. on next page.]

SCHEDULE D—contd.

**5% SECOND MORTGAGE DEBENTURES OF £ 100=Rs. 1,500 EACH, ISSUED
AT £ 94-10 AND PAYABLE AT £101 EACH IN 1937.**

Year	No of Deb	Amount	Redeemed		Balance	Remarks.
			During the year	To date		
		Rs	Rs	Rs	Rs	
1909	1,500	22,50,000			22,50,000	
1910	1,500	22,50,000			22,50,000	
1911	2,000	30,00,000			30,00,000	
1912	2,000	30,00,000			30,00,000	
1913	2,000	30,00,000	1,20,000	1,20,000	28,80,000	
1914	2,000	30,00,000	1,20,000	2,40,000	27,60,000	
1915	2,100	31,50,000	1,20,000	3,60,000	27,90,000	
1916	2,100	31,50,000	1,27,500	4,87,500	26,62,500	
1917	2,100	31,50,000	1,27,500	6,15,000	25,35,000	
1918	2,100	31,50,000	1,27,500	7,42,500	24,07,500	
1919	2,100	31,50,000	1,27,500	8,70,000	22,08,000*	

*On reconstruction of the Company in 1920, the balance of Rs 22,08,000 was paid up inclusive of premium of Rs 15 per Debenture. Redeemed in full

SCHEDULE E.**7% MORTGAGE DEBENTURES OF Rs. 1,00,000 EACH.**

Year.	Authorised, Issued and Paid up.		
	No. of Deb	Amount.	Remarks.
		Rs.	
1921	50	50,00,000	Repayable 1st July, 1935. Further 50 issued on 1st October 1922 Repayable on 1st October 1938.
1922	100	1,00,00,000	
1923	100	1,00,00,000	
1924	100	1,00,00,000	
1925	100	1,00,00,000	
1926	100	1,00,00,000	
1927	100	1,00,00,000	First 50 Debentures of Rupees one lac each repaid on 1-7-1935.
1928	100	1,00,00,000	
1929	100	1,00,00,000	
1930	100	1,00,00,000	
1931	100	1,00,00,000	
1932	100	1,00,00,000	
1933	100	1,00,00,000	
1934	100	1,00,00,000	
1935	50	50,00,000	

SCHEDULE F.**SUMMARY OF TOTAL CAPITAL.**

1905 TO 1935.

Year	Share Capital.	Debentures 4½ and 5 per cent	Year	Share Capital	Debentures 7 per cent
	Rs			Rs	
1905	57,76,050	90 00,000	1920	3,60,00,000	
1906	94,46,700	90,00,000	1921	3,60,00,000	50,00,000
1907	1,39,53,810	90,00,000	1922	3,60,00,000	1,00,00,000
1908	1,79,95,230	90,00 000	1923	3 60,00,000	1,00,00,000
1909	1,79,95,800	1,11,54,345	1924	3 60,00 000	1,00,00,000
1910	1,79,95,800	1,10 74,845	1925	3 60,00,000	1,00,00,000
			1926	3,60,00,000	1,00 00 000
1911	1,79,98,800	1,18,21,095	1927	3,60,00,000	1,00,00,000
1912	1,79,98,800	1,18,13 595	1928	3,60,00 000	1,00 00 000
1913	1,79,98,800	1,16,36,950	1929	3,60,00,000	1,00,00 000
1914	1,79,98,800	1,15,15,950	1930	3,60,00,000	1,00,00,000
1915	1,96,98,800	1,15,45 950	1931	3,60,00 000	1,00,00 000
1916	1,96,98,800	1,11,27,450	1932	3,60,00,000	1,00 00,000
1917	1,98,00,000	1,09 21,485	1933	3 60,00,000	1 00 00,000
1918	2,14,50,000	1,07,90,985	1934	3,60,00,000	1,00,00,000
1919	2,14,50,000	1,05,85,260	1935	3,60,00,000	50 00,000

SCHEDULE C (1). **PROPERTIES AND ASSETS.**

Year.	Goodwill.	Live Stock.	Balance of Cost of old Horse Tramways.	Debenture Expenses	Preliminary Expenses	Rights and Concessions.	Kussara Power Station Assets.
	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.
1905	61,99,990	5,83,840	.....	....	24,15,847	30,05,010	....
1906	61,99,990	5,70,947	.....	....	24,50,435	30,05,010	....
1907	61,99,990	4,56,691	.....	....	27,90,257	30,05,010	....
1908	61,99,990	4,500	17,30,134	..	33,86,360	30,05,010	....
1909	61,99,990	4,500	17,30,134	..	36,25,973	30,05,010	....
1910	61,99,990	3,300	17,30,134	..	37,22,208	30,05,010	....
1911	61,99,990	3,300	17,30,134	....	37,69,934	30,05,010	....
1912	61,99,990	2,400	17,30,134	..	37,72,434	30,05,010	....
1913	61,99,990	2,100	17,30,134	....	37,70,330	30,05,010	....
1914	61,99,990	2,568	17,30,134	.....	37,70,350	30,05,010	....
1915	61,99,990	2,568	17,30,134	2,61,252	35,35,458	30,05,010	....
1916	61,99,990	2,568	17,30,134	1,99,373	35,71,929	30,05,010	....
1917	61,99,990	2,268	17,30,134	1,83,095	35,71,929	30,05,010	....
1918	61,99,990	3,627	17,30,134	1,81,558	35,71,929	30,05,010	....
1919	61,99,990	2,476	17,30,134	1,63,421	35,71,929	30,05,010	....

[Contd. on next page.]

SCHEDULE G (1)—contd.
PROPERTIES AND ASSETS.

Year.	Goodwill	Live Stock.	Balance of Cost of old Horse Tramways.	Debenture Expenses	Preliminary Expenses	Rights and Concessions	Kussara Power Station Assets.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1920	40,00,000	2,476	..	....	....	30,00,000	....
1921	40,00,000	2,176	..	..	2,02,181	30,00,000	....
1922	40,00,000	2,176	..	3,32,722	32,083	30,00,000	....
1923	40,00,000	2,176	..	2,87,722	....	30,00,000	....
1924	40,00,000	2,176	..	....	..	8,95,618	85,17,940
1925	40,00,000	..	..	2,00,000	..	8,54,908	81,69,041
1926	40,00,000	..	..	1,00,000	..	8,14,198	80,33,885
1927	40,00,000	..	..	....	..	7,73,488	80,17,648
1928	40,00,000	..	..	..	..	7,32,778	80,12,082
1929	40,00,000	..	..	..	....	6,92,068	80,11,694
1930	40,00,000	..	..	....	..	6,51,358	80,11,694
1931	40,00,000	..	..	....	..	6,10,648	80,11,694
1932	40,00,000	..	..	..	..	5,69,938	80,11,694
1933	40,00,000	..	..	..	....	5,29,228	80,11,694
1934	40,00,000	..	..	....	....	4,88,518	29,30,538
1935	40,00,000	..	..	....	....	4,47,508	26,86,660

SCHEDULE C (2). PROPERTIES AND ASSETS.

Year.	Cost of License	Land and Buildings	Cables and Mains	Plant and Machinery.	Meters	Permanent Way.
	Rs.	Rs	Rs	Rs	Rs.	Rs.
1905	12,000	18,40,085	7,70,344	5,56,229	9,012	11,25,224
1906	12,000	19,07,994	10,57,984	10,16,256	28,955	16,86,163
1907	12,000	22,78,191	21,39,804	17,51,951	50,587	30,07,118
1908	12,000	18,99,194	20,93,315	22,34,785	74,798	28,75,557
1909	12,000	20,03,772	22,38,268	23,57,478	99,454	28,81,530
1910	12,000	25,02,755	24,41,357	33,75,856	1,29,895	29,21,765
1911	12,000	28,65,221	26,39,474	40,24,913	1,37,126	29,20,996
1912	12,000	26,97,777	28,15,532	43,61,286	1,73,942	29,22,200
1913	12,000	27,37,758	32,38,928	46,24,028	2,25,283	29,32,949
1914	12,000	27,89,059	36,38,094	47,02,233	2,63,532	29,24,955
1915	12,000	27,93,633	39,79,010	47,45,030	3,14,901	29,27,128
1916	15,000	28,93,195	43,37,094	48,13,039	3,92,458	29,38,233
1917	15,000	35,69,282	46,65,967	49,50,755	4,75,544	31,49,224
1918	15,000	37,14,205	49,22,297	57,32,462	5,72,417	32,21,026
1919	15,000	42,50,073	53,60,397	59,05,444	7,46,079	33,07,818

[Contd. on next page].

SCHEDULE G (2)—contd.
PROPERTIES AND ASSETS.

Year	Cost of License	Land and Buildings	Cables and Mains	Plant and Machinery	Meters.	Permanent Way.
	Rs	Rs	Rs	Rs	Rs	Rs
1920	15,000	79,82,464	74,31,653	63,27,537	10,02,240	44,03,799
1921	15,000	93,93,070	81,60,690	71,41,025	12,09,779	46,89,359
1922	15,000	98,27,717	87,69,522	89,80,330	14,53,928	47,99,337
1923	15,000	98,80,860	93,08,324	92,14,157	16,58,808	50,18,986
1924	15,000	80,88,285	98,08,759	55,65,111	18,07,475	52,73,529
1925	15,000	81,88,725	1,01,89,675	30,78,380	18,92,503	52,79,238
1926	15,000	83,57,457	1,03,98,735	32,42,528	19,83,495	52,79,591
1927	15,000	85,34,608	1,07,78,321	33,80,443	20,94,976	53,09,319
1928	15,000	88,27,328	1,12,75,165	34,66,133	21,83,866	58,61,822
1929	15,000	90,58,791	1,19,49,618	37,34,802	23,00,407	59,10,504
1930	15,000	92,61,918	1,25,90,133	39,84,129	23,78,965	59,78,558
1931	15,000	94,49,002	1,28,33,904	39,95,234	24,69,209	60,80,318
1932	15,000	95,11,782	1,29,97,213	41,09,809	25,67,552	60,95,290
1933	15,000	95,82,565	1,31,69,571	41,48,134	26,80,332	62,09,166
1934	15,000	96,12,036	1,34,30,743	41,95,292	27,30,817	63,15,953
1935	15,000	98,70,084	1,36,29,452	42,24,270	28,11,999	64,74,639

SCHEDULE C (3).

PROPERTIES AND ASSETS.

Year.	Overhead Electrical Equipment.	Rolling Stock.	Tools and Equipment.	Furniture.	Omnibuses.	Total.
	Rs	Rs	Rs.	Rs.	Rs.	Rs.
1905	.....	1,67,042	45,283	10,567	.....	1,67,40,465
1906	.....	4,29,448	52,893	12,168	.....	1,84,40,250
1907	.....	14,06,758	97,876	19,679	.....	2,32,05,915
1908	6,90,077	19,12,724	1,05,882	25,370	..	2,62,49,700
1909	6,91,483	20,58,038	1,23,847	24,645	.....	2,70,56,115
1910	6,99,524	20,93,234	1,32,974	26,109	.....	2,89,96,110
1911	7,01,943	21,52,417	1,33,945	30,107	.....	3,03,26,505
1912	7,02,603	22,39,635	1,57,785	33,942	.....	3,08,26,665
1913	7,05,826	22,80,868	1,94,689	39,142	.....	3,16,99,035
1914	7,01,366	24,13,832	2,02,251	40,598	.....	3,23,95,950
1915	7,01,366	24,23,033	2,10,266	43,116	.....	3,28,83,900
1916	7,02,533	24,60,154	2,56,100	47,648	.....	3,35,64,458
1917	7,39,065	27,00,055	3,58,712	95,873	.....	3,54,11,903
1918	7,62,115	33,01,012	4,04,638	1,27,881		3,74,66,301
1919	8,21,967	42,37,569	6,35,645	1,63,775		4,01,76,728

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SCHEDULE C (3)—contd.
PROPERTIES AND ASSETS.

Year.	Overhead Electrical Equipment.	Rolling Stock.	Tools and Equipment.	Furniture.	Omnibuses.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1920	9,60,599	67,00,986	8,77,188	1,97,041	....	4,29,00,984
1921	9,73,127	72,49,017	10,27,122	2,27,582	..	4,72,90,128
1922	9,82,185	75,88,039	10,58,661	2,76,397	..	5,11,18,097
1923	10,32,212	77,46,308	10,79,095	3,02,007	....	5,25,54,656
1924	10,59,868	79,13,911	10,91,157	3,12,676	....	5,13,51,504
1925	10,62,506	79,30,312	11,08,225	3,18,906	....	5,22,87,419
1926	10,64,039	77,56,675	11,61,354	3,24,203	3,36,802	5,28,67,761
1927	10,64,039	77,56,888	12,40,991	3,56,016	7,27,144	5,40,48,881
1928	10,70,363	79,46,777	12,43,076	3,70,377	7,81,575	5,57,86,342
1929	10,72,423	79,69,319	12,67,554	3,88,581	7,70,575	5,71,41,335
1930	10,86,953	76,30,202	12,66,284	3,96,017	7,81,934	5,80,33,147
1931	10,90,806	75,81,185	12,22,006	3,84,430	9,36,698	5,86,80,135
1932	10,90,806	74,62,907	12,25,855	3,95,104	9,36,698	5,89,89,649
1933	10,92,010	74,51,846	14,17,216	3,16,338	11,27,347	5,97,50,728
1934	10,92,814	74,49,425	14,64,024	3,22,547	14,17,465	5,54,65,539
1935	10,98,363	72,76,652	14,88,603	3,17,215	20,87,034	5,64,27,682

SCHEDULE H. **RESERVE FUNDS.**

Year	Staff Fidelity Reserve Account.		Fire Insurance Reserve Account		Reserve against fluctuation in value of Assets		General Reserve Fund.	Grand Total A+B+C+D+E.
	Amount set aside.	Total to date.	Amount set aside and including interest on investment	Total to date	Amount set aside.	Total to date		
		A		B		C	D	
1912	Rs ..	Rs. ..	Rs ..	Rs ..	Rs ..	Rs ..	Rs. 75,000	Rs 75,000
1913	..	..	..	..	..	..	75,000	75,000
1914	..	..	..	..	..	..	75,000	75,000
1915	..	..	..	..	..	..	5,43,000	5,43,000
1916	..	..	..	..	..	..	3,51,486	3,51,486
1917	..	..	..	..	..	..	4,52,243	4,52,243
1918	..	..	..	..	..	..	20,96,919	20,96,919
1919	..	..	..	..	..	..	20,96,919	20,96,919

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SCHEDULE H—contd.
RESERVE FUNDS.

	A	B	C	D	Rs.
	Rs.	Rs.	Rs.	Rs.	Rs.
1920	..	..	..	23,25,000	23,25,000
1921	..	14,792	..	23,59,792	23,59,792
1922	6,000	19,743	..	23,45,000	24,06,735
1923	6,000	34,535	..	23,66,200	27,07,645
1924	12,000	52,332	..	26,43,313	7,35,492
1925	6,000	17,992	75,000	5,72,168	8,90,326
1926	6,000	16,902	1,50,000	6,29,100	9,84,407
1927	6,000	16,271	2,25,000	6,25,910	10,78,085
1928	6,000	14,990	3,00,000	6,23,598	13,51,252
1929	6,000	15,765	3,75,000	8,00,000	15,47,227
1930	42,000	1,34,252	4,50,000	8,98,336	16,46,053
1931	54,000	16,639	5,25,000	8,98,110	17,45,600
1932	6,000	18,052	6,00,000	8,97,999	18,01,026
1932	6,000	18,658	6,75,000	8,97,210	E
	66,000	† 24,785			Reduced charges to consumers
					5,26,725
1933	6,000	16,042	75,000	8,96,988	5,26,725
1934	6,000	21,754	75,000	8,96,856	Income and Super Tax.
					4,00,000
1935	6,000	84,000	75,000	8,96,604	....
					Rs. 41,404
					Rs. 16,619
					Rs. 24,785

† Proportionate Loss on Stores, etc., destroyed by Fire ..
Less Amount set aside including Interest on investment

Grand
Total.

24,24,571
25,27,193

SCHEDULE I. DEPRECIATION ACCOUNT.

Year.	Amount set aside including interest on Investments, Transfers, etc.	Less: Value of old assets renewed and written off.	Net amount set aside during the year.	Total amount set aside to-date
	Rs.	Rs.	Rs.	Rs.
1910	2,29,660		2,29,660	2,29,660
1911	2,32,595	.....	2,32,595	4,62,255
1912	5,94,905	15,225	5,79,680	10,41,935
1913	3,75,535	63,450	3,12,085	13,54,020
1914	4,33,480	86,448	3,47,032	17,01,052
1915	4,51,683	1,57,470	2,94,213	19,95,265
1916	5,38,785	83,365	4,55,420	24,50,685
1917	7,17,029	1,29,403	5,87,626	30,38,311
1918	9,22,448	33,481	8,88,967	39,27,278
1919	10,18,031	88,006	9,30,025	48,57,303
1920	8,21,188	3,21,539	4,99,649	53,56,952
1921	7,42,172	6,05,514	1,36,658	54,93,610
1922	6,42,362	6,43,814	—1,452	54,92,158
1923	10,69,729	6,19,987	4,49,742	59,41,900
1924	16,12,499	4,80,612	11,31,887	70,73,787*

* Due to cessation of Kussara Generating Power Station early in 1925, this depreciation Account was split up under two separate headings from 1925 as shown below :—
[Contd. on next page.]

SCHEDULE I—contd. **DEPRECIATION ACCOUNT.**

Depreciation Account General.				Depreciation Special Account in respect of Kussara Power House Assets.			
Year.	Amount set aside including interest on investment Account.*	Less : Value of old assets renewed and written off.	Net amount set aside for the year.	Total to-date	Amount set aside for the year.	Less written off.	Net amount to-date.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1925	Opening	Balance	7,20,478	44,43,351	Opening	Balance.	26,30,436
1925	12,41,665	5,21,187	7,01,710	51,63,829	2,51,805	1,094	28,81,147
1926	13,28,266	6,26,556	8,37,472	58,65,539	2,45,370	....	31,26,517
1927	14,99,220	6,61,748		67,03,011	2,44,560	....	33,71,077
1928	15,93,695						
	† 4,83,409	4,82,256	15,94,848	82,97,859	2,44,242	....	36,15,340
1929	17,56,235	4,88,968	12,67,267	95,65,126	2,44,242	....	38,59,582
1930	17,68,365	4,53,319	13,15,046	1,08,80,172	2,44,242	....	41,03,824
1931	19,33,382	5,88,357	13,45,025	1,22,25,197	2,44,242	....	43,48,066
1932	16,67,922	3,24,780	13,43,142	1,35,68,339	2,44,242	....	45,92,308
1933	16,93,139	3,77,468	13,15,671	1,48,84,010	2,44,242	....	48,36,550
1934	18,73,831	7,31,768	11,42,063	1,60,26,073			
					Fund discontinued in 1934 by transfer and deduction of the accumulated amount from the cost of old Kussara Power House assets.		
1935	20,67,763	9,08,378	11,59,385	1,71,85,457	The depreciation to be provided every year will be deducted from the balance of the old Kussara Power House assets which are to be written off by 1947.		

* Interests on Investments were included upto 1931

† Adjustment of amount overcharged in previous years.

SCHEDULE J.

DEBENTURE INTEREST.

Year.	Debenture Interest.					
	%	Rs.	%	Rs.	%	Rs.
1905	4½	1,68,657	..	..	..	..
1906	..	4,05,000	..	..	..	..
1907	..	4,05,000	..	..	..	..
1908	..	4,05,000	..	..	..	..
1909	..	4,01,704	5	56,250	..	..
1910	..	3,98,856	..	86,901	..	..
1911	..	3,97,034	..	1,38,750	..	..
1912	..	3,96,780	..	1,50,000	..	..
1913	..	3,94,977	..	1,47,000	..	..
1914	..	3,94,018	..	1,41,000	..	..
1915	..	3,94,018	..	1,42,500	..	..
1916	..	3,82,593	..	1,36,312	..	..
1917	..	3,77,392	..	1,29,938	..	..
1918	..	3,77,257	..	1,23,562	..	..
1919	..	3,74,749	..	1,17,188	..	..
1920	..	1,76,368	..	56,190	..	..
1921	..	..	..	..	7	1,75,000
1922	..	..	..	..	..	4,37,500
1923	..	..	..	..	..	7,00,000
1924	..	..	..	..	..	7,00,000
1925	..	..	..	..	..	7,00,000
1926	..	..	..	..	..	7,00,000
1927	..	..	..	..	..	7,00,000
1928	..	..	..	..	..	7,00,000
1929	..	..	..	..	..	7,00,000
1930	..	..	..	..	..	7,00,000
1931	..	..	..	..	..	7,00,000
1932	..	..	..	..	..	7,00,000
1933	..	..	..	..	..	7,00,000
1934	..	..	..	..	..	7,00,000
1935	..	..	..	..	..	5,25,000

SCHEDULE K. DIVIDENDS.

Year.	Dividends				
	%	Preference	%	Ordinary.	
		Rs		Rs	
1905	6%	70,718	..	..	
1906	6%	2,34,641	..	..	
1907	6%	4,16,465	..	..	
1908	6%	5,39,666	..	..	
1909	6%	5,39,755	..	..	
1910	6%	5,39,748	..	..	
1911	6%	5,39,906	3%	2,70,000	
1912	6%	5,39,928	5%	4,50,000	
1913	6%	5,39,928	6%	5,40,000	
1914	6%	5,39,928	6%	5,40,000	
1915	6%	5,39,928	7%	7,56,000	
1916	6%	5,39,928	10%	10,80,000	
1917	6%	5,39,955	10%	10,80,000	Bonus
			4%	4,32,000	
1918	6%	5,40,000	14%	17,43,000	Bonus
			2%	2,49,000	
1919	6%	5,40,000	14%	17,43,000	Bonus.
			4%	4,98,000	
1920	6%	2,26,369	12%	32,40,000	
	7%	2,36,250			
1921	7%	6,30,000	10%	27,00,000	
1922	7%	6,30,000	10%	27,00,000	
1923	7%	6,30,000	10%	27,00,000	Bonus
			1%	2,70,000	
1924	7%	6,30,000	10%	27,00,000	Bonus
			2%	5,40,000	
1925	7%	6,30,000	14%	37,80,000	
1926	7%	6,30,000	14%	37,80,000	
1927	7%	6,30,000	14%	37,80,000	
1928	7%	6,30,000	14%	37,80,000	
1929	7%	6,30,000	14%	37,80,000	
1930	7%	6,30,000	14%	37,80,000	
1931	7%	6,30,000	14%	37,80,000	
1932	7%	6,30,000	12%	32,40,000	
1933	7%	6,30,000	12%	32,40,000	Bonus
			1%	2,70,000	
1934	7%	6,30,000	12%	32,40,000	Bonus
			1%	2,70,000	
1935	7%	6,30,000	12%	32,40,000	Bonus
			1%	2,70,000	

150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000	1010	1020	1030	1040	1050	1060	1070	1080	1090	1100	1110	1120	1130	1140	1150	1160	1170	1180	1190	1200	1210	1220	1230	1240	1250	1260	1270	1280	1290	1300	1310	1320	1330	1340	1350	1360	1370	1380	1390	1400	1410	1420	1430	1440	1450	1460	1470	1480	1490	1500	1510	1520	1530	1540	1550	1560	1570	1580	1590	1600	1610	1620	1630	1640	1650	1660	1670	1680	1690	1700	1710	1720	1730	1740	1750	1760	1770	1780	1790	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000	3010	3020	3030	3040	3050	3060	3070	3080	3090	3100	3110	3120	3130	3140	3150	3160	3170	3180	3190	3200	3210	3220	3230	3240	3250	3260	3270	3280	3290	3300	3310	3320	3330	3340	3350	3360	3370	3380	3390	3400	3410	3420	3430	3440	3450	3460	3470	3480	3490	3500	3510	3520	3530	3540	3550	3560	3570	3580	3590	3600	3610	3620	3630	3640	3650	3660	3670	3680	3690	3700	3710	3720	3730	3740	3750	3760	3770	3780	3790	3800	3810	3820	3830	3840	3850	3860	3870	3880	3890	3900	3910	3920	3930	3940	3950	3960	3970	3980	3990	4000	4010	4020	4030	4040	4050	4060	4070	4080	4090	4100	4110	4120	4130	4140	4150	4160	4170	4180	4190	4200	4210	4220	4230	4240	4250	4260	4270	4280	4290	4300	4310	4320	4330	4340	4350	4360	4370	4380	4390	4400	4410	4420	4430	4440	4450	4460	4470	4480	4490	4500	4510	4520	4530	4540	4550	4560	4570	4580	4590	4600	4610	4620	4630	4640	4650	4660	4670	4680	4690	4700	4710	4720	4730	4740	4750	4760	4770	4780	4790	4800	4810	4820	4830	4840	4850	4860	4870	4880	4890	4900	4910	4920	4930	4940	4950	4960	4970	4980	4990	5000	5010	5020	5030	5040	5050	5060	5070	5080	5090	5100	5110	5120	5130	5140	5150	5160	5170	5180	5190	5200	5210	5220	5230	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530	5540	5550	5560	5570	5580	5590	5600	5610	5620	5630	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830	5840	5850	5860	5870	5880	5890	5900	5910	5920	5930	5940	5950	5960	5970	5980	5990	6000	6010	6020	6030	6040	6050	6060	6070	6080	6090	6100	6110	6120	6130	6140	6150	6160	6170	6180	6190	6200	6210	6220	6230	6240	6250	6260	6270	6280	6290	6300	6310	6320	6330	6340	6350	6360	6370	6380	6390	6400	6410	6420	6430	6440	6450	6460	6470	6480	6490	6500	6510	6520	6530	6540	6550	6560	6570	6580	6590	6600	6610	6620	6630	6640	6650	6660	6670	6680	6690	6700	6710	6720	6730	6740	6750	6760	6770	6780	6790	6800	6810	6820	6830	6840	6850	6860	6870	6880	6890	6900	6910	6920	6930	6940	6950	6960	6970	6980	6990	7000	7010	7020	7030	7040	7050	7060	7070	7080	7090	7100	7110	7120	7130	7140	7150	7160	7170	7180	7190	7200	7210	7220	7230	7240	7250	7260	7270	7280	7290	7300	7310	7320	7330	7340	7350	7360	7370	7380	7390	7400	7410	7420	7430	7440	7450	7460	7470	7480	7490	7500	7510	7520	7530	7540	7550	7560	7570	7580	7590	7600	7610	7620	7630	7640	7650	7660	7670	7680	7690	7700	7710	7720	7730	7740	7750	7760	7770	7780	7790	7800	7810	7820	7830	7840	7850	7860	7870	7880	7890	7900	7910	7920	7930	7940	7950	7960	7970	7980	7990	8000	8010	8020	8030	8040	8050	8060	8070	8080	8090	8100	8110	8120	8130	8140	8150	8160	8170	8180	8190	8200	8210	8220	8230	8240	8250	8260	8270	8280	8290	8300	8310	8320	8330	8340	8350	8360	8370	8380	8390	8400	8410	8420	8430	8440	8450	8460	8470	8480	8490	8500	8510	8520	8530	8540	8550	8560	8570	8580	8590	8600	8610	8620	8630	8640	8650	8660	8670	8680	8690	8700	8710	8720	8730	8740	8750	8760	8770	8780	8790	8800	8810	8820	8830	8840	8850	8860	8870	8880	8890	8900	8910	8920	8930	8940	8950	8960	8970	8980	8990	9000	9010	9020	9030	9040	9050	9060	9070	9080	9090	9100	9110	9120	9130	9140	9150	9160	9170	9180	9190	9200	9210	9220	9230	9240	9250	9260	9270	9280	9290	9300	9310	9320	9330	9340	9350	9360	9370	9380	9390	9400	9410	9420	9430	9440	9450	9460	9470	9480	9490	9500	9510	9520	9530	9540	9550	9560	9570	9580	9590	9600	9610	9620	9630	9640	9650	9660	9670	9680	9690	9700	9710	9720	9730	9740	9750	9760	9770	9780	9790	9800	9810	9820	9830	9840	9850	9860	9870	9880	9890	9900	9910	9920	9930	9940	9950	9960	9970	9980	9990	10000	10010	10020	10030	10040	10050	10060	10070	10080	10090	10100	10110	10120	10130	10140	10150	10160	10170	10180	10190	10200	10210	10220	10230	10240	10250	1026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SCHEDULE M. **TRACTION.** **TOTAL RECEIPTS, EXPENSES AND NET RESULT.**

Year	Gross Receipts	Gross Expenses	Net Receipts	Operating Expenses		Income and Super Taxes	Total P. C of Expenses.
				Amount	%	Amount	%
	R ^s	R ^s	R ^s	R ^s		R ^s	
1905	6,64,801	3,77,339	2,87,462	3,77,339	57 00		57 00 ⁰ / ₀
1906	15,24,410	8,99,782	6,24,628	8,99,999	58 71	4,783	59 02 ⁰ / ₀
1907	15,80,370	9,68,050	6,21,320	9,59,286	60 36	8,764	60 91 ⁰ / ₀
1908	19,18,297	10,19,501	8,98,796	10,14,712	52 89	4,789	53 14 ⁰ / ₀
1909	20,47,718	10,58,946	9,88,772	10,44,159	50 99	14,787	51 71 ⁰ / ₀
1910	22,00,669	11,02,331	10,98,338	10,80,997	49 53	12,334	50 09 ⁰ / ₀
1911	24,07,858	11,16,738	12,91,120	11,04,950	45 89	11,788	46 38 ⁰ / ₀
1912	24,54,935	11,82,632	12,72,303	11,61,935	47 33	20,697	48 17 ⁰ / ₀
1913	25,60,083	12,16,851	13,43,232	11,90,840	46 52	26,911	47 54 ⁰ / ₀
1914	25,48,269	12,79,456	12,68,813	12,52,335	49 14	27,121	50 20 ⁰ / ₀
1915	25,80,771	11,94,968	13,85,803	11,74,660	45 51	20,308	46 30 ⁰ / ₀
1916	29,81,480	13,17,392	16,64,088	12,70,791	42 62	46,601	44 19 ⁰ / ₀
1917	34,20,990	15,32,110	18,88,790	14,62,653	42 75	69,457	44 78 ⁰ / ₀
1918	39,23,909	17,80,226	21,43,683	16,99,793	43 31	80,433	45 36 ⁰ / ₀
1919	45,65,692	23,44,939	22,20,753	22,42,887	49 13	1,02,052	51 36 ⁰ / ₀

[Could on next page]

SCHEDULE M (2)—contd. **TRACTION.**

TOTAL RECEIPTS, EXPENSES AND NET RESULT.

Year	Gross Receipts		Gross Expenses		Net Receipts		Operating Expenses		Income and Super Taxes		Total P. C of Expenses
	Rs.	o	Rs.	o	Rs.	o	Amount	o	Amount	o	
1920	49,78,303		29,97,256		19,81,047		28,86,270		57.97	1,10,986	2.23
1921	55,36,935		38,37,496		17,99,439		37,00,861		65.66	1,36,635	2.42
1922	58,66,858		40,53,174		18,13,684		39,38,172		67.12	1,15,002	1.96
1923	63,80,507		40,93,824		22,86,683		39,51,240		61.84	1,42,584	2.23
1924	63,67,308		42,62,704		21,04,604		40,46,773		63.56	2,15,931	3.39
1925	60,40,112		39,38,023		21,02,089		37,09,814		61.43	2,28,209	3.77
1926*	62,26,838		39,16,974		23,09,864		36,77,801		59.06	2,39,173	3.84
1927	68,50,222		44,29,126		24,21,096		41,66,492		60.82	2,62,634	3.83
1928	68,53,217		45,66,477		22,86,740		42,93,484		62.65	2,72,993	3.98
1929	67,29,285		46,49,950		20,79,335		43,94,463		65.39	2,55,487	3.80
1930	65,56,778		46,07,463		19,49,315		43,70,007		66.65	2,37,456	3.62
1931	66,87,596		45,15,270		21,72,326		42,34,898		63.33	2,80,372	4.19
1932	61,59,614		45,43,264		16,16,350		41,69,413		67.69	3,73,851	6.07
1933	65,46,824		45,23,596		20,23,228		42,07,670		63.88	3,15,926	4.80
1934	67,05,655		46,24,780		20,80,875		42,38,636		63.21	3,86,144	5.76
1935	71,56,555		47,68,695		23,87,860		43,91,701		61.36	3,76,994	5.27

* Including Omnibus Department expenses. Service started in July, 1926.

SCHEDULE N. SUPPLY.

TOTAL RECEIPTS, EXPENSES AND NET RESULT.

Year	Gross Receipts		Gross Expenses		Net Receipts		Operating Expenses		Income and Super Taxes		Total P. C. of Expenses	
	R ^s	¢	R ^s	¢	R ^s	¢	Amount	%	Amount	%	R ^s	¢
1905	8,296		36,249		27,953		36,249		R ^s		437,000	00
1906	1,26,539		1,51,133		24,594		1,51,133				120,000	00
1907	3,23,492		2,93,172		30,320		2,93,172				91,000	00
1908	7,15,712		5,96,058		1,19,654		5,95,274	83.17	784	11	83,280	00
1909	8,63,294		6,14,023		2,49,271		6,12,857	70.99	1,166	13	71,120	00
1910	10,03,828		6,58,467		3,45,361		6,56,291	65.38	2,176	22	65,600	00
1911	11,47,962		7,23,969		4,23,993		7,16,169	62.39	7,800	68	63,070	00
1912	13,71,210		6,85,248		6,85,962		6,77,508	49.41	7,740	56	49,970	00
1913	15,81,995		6,94,260		8,87,735		6,85,115	43.24	9,145	57	43,810	00
1914	19,90,042		8,36,015		11,54,027		8,24,856	41.44	11,159	56	42,600	00
1915	20,70,313		8,71,987		11,98,326		8,52,485	41.18	19,504	94	42,120	00
1916	25,67,507		9,34,390		16,33,117		8,98,426	34.99	35,964	140	36,390	00
1917	31,20,314		11,95,686		19,24,628		11,20,151	36.19	66,535	213	38,320	00
1918	35,22,077		14,65,542		20,56,535		13,83,174	39.27	82,368	234	41,610	00
1919	45,21,877		18,27,915		26,93,962		17,31,006	38.30	95,919	212	40,420	00

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SCHEDULE N—*contd.* **SUPPLY.**

TOTAL RECEIPTS, EXPENSES AND NET RESULT.

Year	Gross Receipts		Gross Expenses	Net Receipts		Operating Expenses		Income and Super Taxes		Total P C of Expenses.	
	Rs	Rs	Rs	Rs	Rs	Rs	Amount	%	Amount		%
1920	50,96,985	21,26,556	29,70,429	19,98,767	39 15	1,27,789		2.57		41.72%	
1921	59,70,388	28,39,561	31,30,827	26,43,093	44 27	1,96,468		3.29		47.56%	
1922	65,92,828	32,13,262	33,79,566	30,23,716	45 57	1,89,546		2.89		48.74%	
1923	75,38,996	34,04,504	40,44,492	32,32,000	42.57	2,62,504		3.48		46.35%	
1924	80,79,636	36,49,028	44,30,608	32,39,578	40 10	4,09,450		5.07		45.17%	
1925	84,10,229	36,44,075	47,66,154	31,68,848	37.68	4,75,227		5.65		43.33%	
1926	86,56,935	40,85,146	45,71,789	35,48,269	40 99	5,36,877		6.20		47.19%	
1927	91,20,092	44,34,672	46,85,420	39,02,019	42 78	5,32,653		5.84		48.62%	
1928	95,85,597	45,52,871	50,32,726	40,22,828	41.97	5,30,043		5.53		47.50%	
1929	1,01,42,854	48,24,199	53,18,665	42,72,688	42 12	5,51,501		5.44		47.56%	
1930	1,02,70,423	50,23,282	52,47,141	44,27,138	43 11	5,96,144		5.80		48.91%	
1931	1,04,44,684	53,06,166	51,38,518	45,55,874	43 62	7,50,292		7.18		50.80%	
1932	99,74,592	54,43,515	45,31,077	45,42,849	45 54	9,00,666		9.03		54.57%	
1933	1,06,29,721	55,56,949	50,72,772	47,00,431	44 22	8,58,518		8.06		52.28%	
1934	1,07,20,887	58,36,553	48,84,334	48,69,612	45 42	9,66,941		9.02		54.44%	
1935	1,06,46,380	58,76,753	47,69,627	49,84,249	46.81	8,92,504		8.39		55.20%	

SCHEDULE O.
COMBINED RESULT, (TRACTION AND SUPPLY).
TOTAL RECEIPTS AND EXPENSES AND NET RESULT
AND TAXATION.

Year.	Gross Receipts.	Gross Expenses.	Net Receipts.	Ratio of Expenses to Receipts	Total Taxation (Income, Super Tax, etc.) charged to Account
	Rs	Rs	Rs		Rs
1905	6,73,097	4,13,588	2,59,509	61.45%	....
1906	16,50,949	10,50,915	6,00,034	63.66%	4,783
1907	19,12,862	12,61,222	6,51,640	65.93%	8,764
1908	26,34,009	16,15,559	10,18,450	61.33%	5,573
1909	29,11,012	16,72,969	12,38,043	57.47%	15,953
1910	32,04,497	17,60,798	14,43,799	54.95%	14,510
1911	35,55,820	18,40,707	17,15,113	52.77%	19,588
1912	38,26,145	18,67,880	19,58,265	48.82%	28,437
1913	41,42,078	19,11,111	22,30,967	46.14%	35,156
1914	45,38,311	21,15,471	24,22,840	46.61%	38,280
1915	46,51,084	20,66,955	25,84,129	44.44%	39,812
1916	55,48,987	22,51,782	32,97,205	40.58%	82,565
1917	65,41,214	27,27,796	38,13,418	41.70%	1,35,992
1918	74,45,986	32,45,768	42,00,218	43.59%	1,62,801
1919	90,87,569	41,72,854	49,14,715	45.92%	1,97,971
1920	1,00,75,288	51,23,812	49,51,476	50.86%	2,38,775
1921	1,16,07,323	66,77,057	49,30,266	57.52%	3,33,103
1922	1,24,59,686	72,66,436	51,93,250	58.32%	3,04,548
1923	1,39,28,503	75,88,328	63,40,175	54.48%	4,05,088
1924	1,44,46,944	79,11,732	65,35,212	54.76%	6,25,281
1925	1,44,50,341	75,82,098	68,68,243	52.47%	7,03,436
1926	1,48,83,773	80,02,120	68,81,653	53.76%	7,76,050
1927	1,59,70,314	88,63,798	71,06,516	55.50%	7,95,287
1928	1,64,38,814	19,19,348	73,19,466	55.47%	8,03,036
1929	1,68,63,139	94,74,140	73,88,999	56.18%	8,06,988
1930	1,68,27,202	96,30,745	71,96,457	57.23%	8,33,600
1931	1,71,32,280	98,21,436	73,10,844	57.33%	10,30,664
1932	1,61,34,206	99,86,778	61,47,428	61.90%	12,74,517
1933	1,72,16,546	1,00,80,546	71,36,000	58.55%	11,72,244
1934	1,74,26,542	1,04,61,333	69,65,209	60.03%	13,53,085
1935	1,78,02,935	1,06,45,448	71,57,487	59.80%	12,69,498
Total					1,35,15,485

SCHEDULE P.

SUPPLY STATISTICS.

Year.	No of Consumers.	Units sold.			Electricity Duty paid to Govt.
		Tramway.	General.	Total.	
1905	107	....	26,148	26,148	Rs. ..
1906	330	....	5,25,806	5,25,806	..
1907	588	8,23,246	12,33,661	20,56,907	..
1908	803	35,24,954	17,32,676	52,57,630	..
1909	1,084	41,69,434	20,83,678	62,53,112	..
1910	1,494	47,80,793	25,16,063	72,96,856	..
1911	2,091	45,81,614	33,56,184	79,37,798	..
1912	3,112	47,92,167	43,64,977	91,57,144	..
1913	4,468	51,50,302	57,92,308	1,09,42,610	..
1914	5,514	49,64,614	96,76,968	1,46,41,582	..
1915	6,935	46,15,985	99,74,039	1,45,90,024	..
1916	8,998	47,25,828	1,28,34,137	1,75,59,965	..
1917	10,900	56,12,749	1,61,62,152	2,17,74,901	..
1918	12,041	58,62,580	1,75,26,955	2,33,89,535	..
1919	14,144	66,25,620	2,72,85,400	3,39,81,020	..
1920	19,688	73,43,091	2,68,07,317	3,41,50,408	..
1921	23,113	93,99,366	3,16,38,474	4,10,37,839	..
1922	27,144	89,35,247	3,56,92,893	4,46,28,140	..
1923	30,485	1,04,27,617	4,15,16,649	5,19,44,266	..
1924	34,123	1,10,32,917	4,36,64,272	5,46,97,189	..
1925	36,454	88,24,863	4,61,86,544	5,50,11,407	..
1926	38,377	84,92,436	4,77,81,160	5,62,73,596	..
1927	41,652	82,32,875	5,02,26,796	5,84,59,671	..
1928	44,748	83,83,845	5,05,78,267	5,89,62,112	..
1929	48,446	96,66,316	5,44,39,086	6,41,05,402	..
1930	51,180	1,05,60,233	5,51,90,873	6,57,51,106	..
1931	54,489	1,06,67,308	5,76,84,717	6,83,52,025	..
1932	57,009	1,02,54,548	5,75,88,936	6,78,43,484	4,90,153*
1933	58,955	1,13,16,613	6,17,97,378	7,31,13,991	6,76,232
1934	61,752	1,12,79,757	6,61,10,059	7,73,89,816	6,93,011
1935	65,412	1,15,84,849	7,03,93,162	8,19,78,011	7,44,574

* April to December.

SCHEDULE Q.
STATEMENT OF UNITS GENERATED, PURCHASED AND MAXIMUM DEMAND, ETC.

Year.	Generated by Steam	Purchased from Hydro-Group	Total units delivered to feeders.	Maximum Demand KW.	REMARKS
	(1)	(2)			
1907	2,946,281	....	2,946,281	1,886	(1) Supply commenced for public from September 1905
1908	7,389,268	....	7,389,268	2,546	
1909	8,269,380	....	8,269,380	2,876	(2) In 1919 from 10th January to July, we supplied Tata Hydro Coy., 5,810,520 units
1910	9,212,637	....	9,212,637	3,186	
1911	9,984,928	....	9,984,928	4,897	
1912	11,850,660	....	11,850,660	4,185	
1913	13,962,748	....	13,962,748	4,650	
1914	17,904,920	....	17,904,920	5,224	
1915	18,066,424	....	18,066,424	5,439	
1916	20,956,630	485,601	21,442,231	5,801	
1917	22,414,657	4,142,249	26,556,906	6,396	
1918	20,787,793	8,727,116	29,514,909	6,125	
1919	37,417,969	2,911,701	40,329,670	8,091	

[Contd. on next page.]

SCHEDULE Q—contd.

STATEMENT OF UNITS GENERATED, PURCHASED AND MAXIMUM DEMAND, ETC.

Year.	Generated by Steam.	Purchased from Hydro-Group	Total units delivered to feeders.	Maximum Demand KW.	REMARKS
1920	36,985,908	4,288,999	41,274,907	9,833	
1921	41,266,191	7,791,768	49,057,959	14,595	
1922	36,625,577	15,884,079	52,509,656	16,406	
1923	32,084,801	28,069,836	60,154,637	18,695	
1924	30,106,768	32,480,337	62,587,105	18,915	
1925	639,646	63,102,351	63,741,997	17,357	
1926	....	64,498,323	64,498,323	18,586	
1927	....	66,348,303	66,348,303	20,094	
1928	....	67,236,671	67,236,671	21,633	
1929	....	73,908,055	73,908,055	23,904	
1930	....	75,821,010	75,821,010	21,951	
1931	....	77,904,514	77,904,514	23,000	
1932	....	77,581,424	77,581,424	23,548	
1933	....	82,683,869	82,683,869	24,263	
1934	....	87,975,555	87,975,555	25,379	
1935	....	93,087,739	93,087,739	26,279	

SCHEDULE R.
STATEMENT OF UNITS SOLD AND GROSS RECEIPTS DURING THE YEARS 1905 TO 1935.

Year.	Units sold.			Amount.			
	Traction	Power	General	Traction.	Power.	General.	Total.
1905	.....	.....	26,148	Rs.	Rs.	Rs.	Rs
1906	.....	.....	5,25,806	.....	.....	8,296	8,296
1907	8,23,246	.....	12,33,661	57,889	.....	1,26,539	1,26,539
1908	35,24,954	.....	17,32,676	3,30,464	.....	2,65,555	3,23,444
1909	41,69,434	.....	20,83,678	3,90,885	.....	3,85,248	7,15,712
1910	47,80,793	.....	25,16,063	4,48,199	.....	4,72,299	8,63,184
1911	45,81,614	.....	33,56,184	4,29,526	.....	5,50,669	9,98,868
1912	47,92,167	.....	43,64,977	4,49,267	.....	7,12,720	11,42,246
1913	51,50,302	.....	57,92,308	4,18,452	.....	9,09,430	13,58,697
1914	49,64,614	.....	96,76,968	4,03,374	.....	11,62,287	15,80,739
1915	46,15,985	.....	99,74,039	3,17,349	.....	15,85,297	19,88,671
1916	47,25,828	.....	1,28,34,137	3,24,900	.....	17,50,863	20,68,212
1917	56,12,749	.....	1,61,62,152	3,50,797	.....	22,40,767	25,65,667
1918	58,62,580	41,22,269	1,34,02,244	3,66,411	.....	27,67,984	31,18,781
1919	66,95,620	50,53,751	2,22,31,649	4,18,476	3,71,370	27,81,118	35,18,899
					4,58,135	37,23,906	46,00,517

[Contd. on next page.]

SCHEDULE R—contd.

STATEMENT OF UNITS SOLD AND GROSS RECEIPTS DURING THE YEARS 1905 TO 1935.

Year	Units sold.			Amount			
	Traction.	Power.	General	Traction	Power.	General.	Total
				Rs	Rs	Rs	Rs
1920	73,43,091	66,80,662	2,01,26,655	3,67,155	5,99,750	41,27,835	50,94,740
1921	93,99,366	83,58,034	2,32,30,439	4,69,968	7,41,402	47,46,893	59,58,263
1922	89,35,247	98,18,071	2,58,36,782	4,46,764	8,71,789	52,50,169	65,68,702
1923	1,04,27,617	1,26,65,034	2,88,51,615	5,21,381	10,74,792	59,39,281	75,35,454
1924	1,10,32,917	2,22,07,418	2,14,56,854	5,51,646	18,51,209	56,74,407	80,77,562
1925	88,24,863	2,31,71,730	2,30,14,814	4,41,243	19,16,682	60,49,945	84,07,870
1926	84,92,436	2,41,00,378	2,36,50,782	4,24,622	18,56,020	62,44,210	86,54,852
1927	82,32,875	2,51,14,732	2,51,12,064	4,11,644	20,25,392	66,80,331	91,17,367
1928	83,83,845	2,35,92,956	2,69,85,311	4,19,192	19,66,051	71,97,775	95,83,018
1929	96,66,316	2,65,44,785	2,78,94,301	4,83,316	21,80,708	74,68,194	1,01,41,218
1930	1,05,60,233	2,71,53,324	2,80,37,549	5,28,012	22,08,566	75,31,269	1,02,67,847
1931	1,06,67,308	2,93,34,826	2,83,49,891	5,33,365	22,79,179	76,24,022	1,04,36,566
1932	1,02,54,548	3,12,63,468	2,63,23,468	5,12,727	23,30,452	71,23,215	99,66,394
1933	1,13,16,613	3,39,13,439	2,78,53,939	5,65,830	24,98,695	75,52,896	1,06,17,421
1934	1,12,79,757	3,54,73,770	3,06,36,249	5,63,948	25,12,436	76,29,150	1,07,05,574
1935	1,15,84,849	3,83,34,502	3,20,58,660	5,79,242	23,65,732	76,77,309	1,06,22,283

[illegible]

SCHEDULE V.

STAFF PROVIDENT FUND AND COMPANY'S CONTRIBUTION, ETC.

Year	Staff subscription with interest	Company's Contribution to P F with interest	Combined Total
	Rs	Rs	Rs
1914	36,558	34,550	71,108
1915	73,864	72,683	1,46,547
1916	1,07,558	1,10,100	2,17,658
1917	1,54,451	1,56,262	3,10,713
1918	2,08,137	2,52,044	4,60,181
1919	2,83,530	3,27,996	6,11,526
1920	4,09,123	4,68,319	8,77,442
1921	5,54,658	6,38,248	11,92,906
1922	5,96,339	7,61,170	13,57,509
1923	7,66,110	8,44,886	16,10,996
1924	9,28,515	10,17,277	19,45,792
1925	10,46,960	13,22,665	23,69,625
1926	12,09,588	14,68,177	26,77,765
1927	13,48,425	15,81,403	29,29,828
1928	15,16,961	17,29,996	32,46,957
1929	17,14,659	19,14,703	36,29,362
1930	22,07,788	20,75,232	42,83,020

Year	Staff Subscription with interest.	Company's Contribution with interest	Reserve etc	Total	
	Rs	Rs	Rs	Rs	
1931	21,84,773	23,76,059	1,36,910	46,97,742	Fund was registered and transferred to Trustees on 1-5 31
1932	24,07,794	25,96,126	4,98,005	55,01,925	
1933	26,45,074	28,31,152	7,97,595	62,73,821	
1934	29,18,736	31,06,877	11,48,767	71,74,380	
1935	31,14,883	32,79,554	10,50,288	74,44,675	

There were in all 5,142 employees on 31st December, 1935 Out of these 4,389 were members of the Provident Fund.

[THE END]

